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United States Circuit Court, District of Minnesota
Third Division.

JOHN S. KENNEDY AND HENRY F. DIMOCK

vs.

GREAT NORTHERN RAILWAY COMPANY, GEORGE T. SIMPSON, IRA B. MILLS, CHARLES F. STAPLES, CHARLES E. ELMQUIST, WALTER SCOTT, H. P. WEBB, JOHN PALM, L. LARSON, TOM GUNNESS and S. S. GLARUM.

HENRY A. JAMES

vs.

GREAT NORTHERN RAILWAY COMPANY, GEORGE T. SIMPSON, IRA B. MILLS, CHARLES F. STAPLES, CHARLES E. ELMQUIST, WALTER SCOTT, H. P. WEBB, JOHN PALM, L. LARSON, TOM GUNNESS and S. S. GLARUM.

The above entitled actions came on for hearing before Hon. Chas. E. Otis, Special Master, at Room 306 Federal building, St. Paul, Minn., on Monday, March 15, 1909, at 10 o'clock a. m.

APPEARANCES:

HOW, BUTLER & MITCHELL, ROBERT THORNE and HALE HOLDEN,

Solicitors on behalf of Complainants.

EDWARD T. YOUNG, Attorney General, and THOMAS D. O'BRIEN and EDMUND S. DURMENT,

Solicitors on behalf of Defendants, members of the Railroad & Warehouse Commission, et al.

ALBERT H. HOGELAND,

sworn on behalf of Complainants, testified:

By Mr. HOLDEN:

Q. Mr. Hogeland, you live in St. Paul?

A. Yes, sir.

Q. You are the Chief Engineer of the Great Northern Railway Company?

A. Yes, sir.

Q. How long have you been connected with that Company?

A. About thirty years.

Q. Will you state, briefly, the different capacities in which you have been connected with the Company?

A. I began in April, 1879, and from April until September I was a rodman and leveler on lines in the western part of Minnesota and eastern part of Dakota. From September, 1879, till March, 1880, I was on surveys as a leveler for lines between St. Paul and Chicago, under Mr. Stickney. From April, 1880, to February, 1882, I was a leveler, topographer and transit-man on surveys for the Northern Pacific, in the Yellowstone and Rocky Mountain divisions. From February, 1882, to March, 1884, I was assistant engineer for the Northern Pacific in the construction of the Bozeman tunnel and a stretch of heavy mountain work adjacent to the tunnel. From April, 1884, to September of the same year, I was assistant engineer on construction of lines in North Dakota for the St. Paul, Minneapolis & Manitoba Company. From September of the same year to June, 1885, I was assistant engineer on construction of lines for the Northern Pacific between Superior and Ashland. From July, 1885, to date I have been with the Manitoba Company and its successor the Great Northern Company, first as assistant engineer, supervising locations and construction of lines in Minnesota, North Dakota, South Dakota and Montana. In September 1890, I was appointed engineer

of maintenance of way, which involved general supervision of maintenance work for the lines east of Great Falls. I continued in that capacity until August, 1896, when I was appointed resident engineer for the eastern district, the duties being quite similar to previous duties except that I had more to do with construction of lines. I continued in that capacity until March 1, 1902, when I was appointed assistant chief engineer, and on February 10, 1903, I was appointed chief engineer.

Q. At the time you first went with the Manitoba Company, which you say was the predecessor of the Great Northern, approximately what was the mileage of the system?

A. Between five and six hundred miles.

Q. And how far west had it been constructed, approximately?

A. No lines beyond Minnesota.

Q. And since that time, to what extent have you been connected with the actual work of locating and surveying the new lines as they have been constructed?

A. For the four-years period that I was on the Northern Pacific I was not familiar, of course, with the lines being built by the Manitoba Company, but since July, 1885, I have been quite familiar with all of the lines that have been constructed.

Q. That is, the new construction?

A. Yes, sir.

Q. Carrying the system from Minnesota westward to the coast?

A. Well, there was a considerable amount of construction in North Dakota, previous to 1885, during the period that I was with the Northern Pacific, that I was not familiar with the construction of those lines.

Q. I understand that during that period you were out of touch, but speaking entirely generally now, the period of your service with the Company has embraced, in a substantial sense,

the construction of it from Minnesota westward to the coast, has it not?

A. Yes, sir.

Q. Now, speaking of the lines in Minnesota, state to us, briefly, what your connection has been with those lines, in the way of maintenance or reconstruction and matters of that kind.

A. I have had very largely to do with construction and reconstruction of practically all the lines in Minnesota, both in the matters of surveys and field work and the actual carrying out of the work of construction in the field.

Q. A large part of your time, I take it, is and has been spent out on the line, at various points where work has been going on or was being projected?

A. Yes, sir; that is more particularly true previous to my appointment as assistant chief engineer.

Q. Now, in connection with this litigation, Mr. Hogeland, you were asked to prepare a series of statements showing the cost of reproduction of the lines in the state of Minnesota, were you not?

A. Yes, sir.

Q. To what extent, in your work as engineer for the Great Northern, have you had to do with making estimates for work?

A. I have had a great deal to do with the making of estimates; probably for more than one-half of the lines, since coming with the Company in 1879.

Q. Now, to what extent has your work involved the carrying out of the work covered by such estimates; that has also been a large part of the work, has it not?

A. Yes, sir.

Q. In that way has there been opportunity given you, from time to time during these years, of determining the relation between the estimates and the actual result, the expense which the particular work ultimately has cost?

A. Yes, I have had a particularly good opportunity to ob-

serve that feature, by reason of having had to do with the first preparation of the estimates and then the execution of the work and knowing the actual cost after it was completed.

Q. Can you state, approximately, the number of miles of line that have been constructed during your connection with the Great Northern Company and its predecessors?

A. You speak of the entire system?

Q. Yes; with which you have had connection in some one or the other capacities that you have referred to.

A. I think to the extent of about 2500 miles.

Q. That is new construction?

A. Yes, sir.

Q. That is all over the system?

A. Yes, sir.

Q. Can you tell us about how many miles have been constructed in the state of Minnesota during your connection with the Company?

A. I think something over a thousand miles.

Q. To what extent have the remainder of the lines in Minnesota been reconstructed during that period?

A. Well, a considerable portion of the original main lines between St. Paul and Breckenridge and between Minneapolis and Barnesville have been reconstructed during that time.

Q. In preparing your statements, will you state, briefly, the method that you have followed? I note that you have adopted a list of items, forty-one in all, but before turning to the papers, just state briefly your method.

A. We have followed the method outlined by Mr. Morgan in calling for details of different items of the different systems in Minnesota, in accordance with the understanding reached at a meeting held at the office of the Railroad & Warehouse Commission early in 1906.

Q. A plan at that time was proposed by the engineer for the state for classifying the different items, and, as I recall it,

blanks were furnished the different railroads which they were called upon to fill out, and you have followed that same method in making up these figures?

A. At the first meeting with reference to this subject, the matter was discussed in a general way, and afterwards Mr. Morgan sent out his blanks, calling for the information in great detail, and we have followed that same plan in preparing our statements which we submit here.

Q. That was in 1906?

A. Yes, sir; in the spring of 1906.

Q. For how long have you been at work on this problem of ascertaining the value, the cost of reproduction of these lines, both in Minnesota and outside of this state and in the other states in which the system runs?

A. We have been engaged upon it ever since that time. That would be practically three years.

Q. There was a litigation before the Interstate Commerce Commission, brought by the city of Spokane and others, involving rates from that city, and in that case there were figures introduced of the valuation of the property; did you have any connection with that work?

A. Yes, sir; I presented a statement giving the valuation of the Great Northern system at that time.

Q. That was perhaps the beginning of this work of valuing the property that has been going on for the last three years?

A. No, the work in Minnesota was really the beginning. We used the Minnesota figures as far as they would apply in preparing this statement for the Portland hearing. The hearing at which I presented my statement was at Portland.

Q. I wasn't sure which was the first of the two; but, to put the matter briefly, then, if I understand, for the last three years, approximately, this matter has been under consideration and examination, and has resulted in making up the figures you now have?

A. Yes, sir.

Q. Now, coming down to more recently, have you recently gone over the lines in the state of Minnesota for the purpose of making an inspection of them for this purpose?

A. Yes, sir; during the month of February.

Q. To what extent have you based these figures upon records in your office? I don't mean now with reference to any particular item, but generally speaking.

A. All of the figures are based on records in our office wherever such records could be obtained.

Q. Generally speaking, they are based on records as far back as the books and papers of the Company go, including original profiles and subsequent profiles, and matters of that kind?

A. Yes, sir.

Q. And as to matters where you have no records at all, what method have you pursued?

A. We have either obtained the information on the ground or taken estimates from our profiles.

Q. Well, in your consideration of the various problems involved in this matter, have you arrived at a judgment as to the accuracy of the records you find, as to whether they are reasonably accurate or appear to be so, and sufficiently so to be relied upon?

A. Yes, sir; everything indicates, from our investigation, that they are accurate and can be relied upon.

Q. Have you got a map of the lines of the system in the state of Minnesota with you?

A. Yes, sir; (producing map) it is a tracing from the Commissioners' map.

Q. This map that you have produced is a copy of the Commissioners' map of the state of Minnesota, is it not?

A. It is traced from the Commissioners' map; not all the information shown on the Commissioners' map is shown on that.

Q. The lines of the Great Northern are indicated by heavy lines, in various colors?

A. Yes, sir.

Q. It seems to be divided into various sections. How many sections have you divided the road into?

A. Divided it into forty-six sections.

Q. What was the purpose of making that division?

A. That was done for convenience and accuracy in working up the details of the estimates,—it was a method suggested by Mr. Morgan,—rather than to turn the whole system in as one section, so that the various items could be more readily checked.

Q. Then, as I understand you, in ascertaining the cost of reproduction, you took up each section by itself?

A. Each of the forty-six sections, yes, sir; each section was considered separately.

Q. And then of course the total result was thrown together?

A. Yes, sir.

Q. Now, I notice other figures on this map; will you explain what those are?

A. The lines are colored to show a proposed scheme for reproducing the system in a period of eight years. The colors indicate the portion of the system which under that scheme would be reproduced each year.

Q. Then, if I understand it, leading out from Minneapolis and St. Paul, certain of the lines are colored in blue, and have under them the words "First year"; in your plan you would conceive that the beginning of the reproduction of the system would start, so far as Minneapolis and St. Paul is concerned, at that point, and the amount shown in those lines would be constructed during that year?

A. That would be a part of it. We consider, first, that the reconstruction of the terminals would proceed during the entire period of eight years; therefore, I have not shown that part colored; but, starting from the terminals of Minneapolis and

the head of the lakes, we figure that a certain amount of construction would be undertaken each year.

Q. I notice the same color (blue,) at the head of the lakes; also up in the northwestern part of the state, a similar section of track.

A. Yes, sir.

Q. Those are the three points, if I understand you, where under your plan you would begin construction work?

A. Yes, sir.

Q. And the quantities shown in blue would, according to your judgment, be constructed during the first year?

A. Yes, sir.

Q. Now, following that idea out, the map shows, in different colors, the different miles or lines that would be constructed each year thereafter during the course of the eight years?

A. Yes, sir; according to the scheme shown on this map.

Q. Well, now, what was the rule or basis upon which you made up this map, in showing the method of construction?

A. We figured to apportion the steam-shovel work and team work of grading somewhat equally for each period of the eight years, and that was the principal thing that guided us in blocking out that scheme.

Q. That you considered to be the more economical method of approaching that problem?

A. I didn't consider it to be possible to do all the steam-shovel work first and then do the team work afterwards, but that both should proceed at the same time. That made it necessary to pick out certain portions of the line that would be done largely by teams to work along with the steam-shovel work. I am speaking now of grading, which is the principal thing that would determine the progress of the work.

Q. And expedition, also, was considered in your plan, as well as economy?

A. Yes, sir; they both enter into it.

Q. Now, then, taking the lines projected for the first year, where would you do your steam-shovel work and where your team work, during that year?

A. We planned to do the steam-shovel work beginning at the eastern terminals, St. Paul and Minneapolis; also at the Head-of-the-lakes terminal, and proceeding as far as it appeared we would be able to do steam-shovel work in one season; and for the team work we took a section in the Red River Valley where work would be done that way altogether.

Q. And that map, as it stands, represents your best judgment as to the most economical and expeditious method of reproducing these lines in the state of Minnesota?

A. Yes, sir; after giving the matter considerable study, I believe that is as good a method, as economical a method, to reproduce them as we can figure.

Q. The figures you have prepared, showing the cost of reproduction of the property, are based on a reproduction in eight years?

A. Yes, sir.

Q. To what time have you brought down your figures?

A. To June 30, 1908.

The map produced was marked for identification Complainants' Ex. 1-Hogeland.

Q. The records which you have used for making up the figures you have been referring to are all in your possession, or that of the Company, here in St. Paul, are they not, so far as they pertain to the lines of Minnesota, and are accessible to counsel for the state and Mr. Morgan, for review and check of the testimony, if they desire?

A. Yes, sir.

Q. Generally speaking, all of the information, records, books, papers and matters of that kind which you have used, are open to the other side, for such examination and use as they may desire to make, for the purpose of examining the methods

and details you have used in arriving at your result?

A. Yes, sir; I understand the matter that way.

Q. Turning to this collection of tables marked Complainant's Ex. 2-Hogeland, will you briefly state what the first sheet shows?

A. The first sheet shows the summary of the cost of reproduction of the lines in Minnesota of the sheets which follow.

Q. Using the forty-one different items which you described before, and which were used, as I understand by Mr. Morgan, in the method he adopted and suggested to the railroad?

A. Yes, but I should probably qualify that by saying that we have added some items which Mr. Morgan did not have. So far as the items go that Mr. Morgan had, we have followed, but we have some items added which did not appear in Mr. Morgan's letter.

Q. Will you indicate what items those are?

A. My recollection is that Mr. Morgan did not have items 39, 40 and 41. It is possible there is another item that he did not have.

Q. Looking at this summary, the first item embraces the cost of reproducing right-of-way, yards and terminals in the State of Minnesota. From what sources did you obtain that figure of $30,635,921?

A. That was prepared by the right-of-way department, and I have placed their figures in my statement.

Mr. HOLDEN: We will produce a witness, if your Honor please, in support of that figure.

Q. The second item embraces grading, clearing and grubbing. You have a separate sheet covering that item and showing, in considerable detail, how it is made up, have you not?

A. Yes.

Q. And the same is true with each of the other items shown in the summary?

A. Yes, sir.

Q. Turning to the second page of the exhibit, that contains a division of the line into the 46 sections shown on the map and shows the main-line mileage, second track, side-tracks and total track, if I understand it correctly?

A. Yes, sir.

Q. That is, as of the 30th of June, 1908. Will you state, in the record, now, the amount of main-line mileage in the state, so that it may appear?

A. The main-line mileage is 2,056.07 miles; second track 99.81 miles, side-track 623.42 miles, total 2799.30 miles.

Q. How do you arrive at those figures?

A. They are arrived at from our records of the length of each line and side-track that appear in our office.

Q. And are as nearly accurate as they could possibly be without an exact measurement today of the length of the lines?

A. Yes—and you probably would not get them any more accurate then.

Q. The third page of your exhibit contains a specification of the lands for right-of-way, yards and terminals, dividing the line again into the same 46 sections, does it not?

A. Yes, sir.

Q. Those figures are taken, I understand you, from figures furnished you by the right-of-way department?

A. They are.

Q. So that there may be no misunderstanding, the colored sections in the map do not attempt to show the 46 sections of the road, as I understand it.

A. No, but there is a figure, not brought out very plainly on the map, which does show the section.

Q. But so that it may be understood, the 46 sections are on a somewhat different basis than the colored sections, the colored sections being purely with reference to the method of constructing the line during the period of eight years, the 46 sections

appearing by other marks on the map—that is the fact, is it not?

A. Yes.

Q. Turning to the next sheet of this exhibit, which is entitled "Item No. 2, Grading, Clearing and Grubbing," that again divides the line into 46 sections, if I understand it. Will you briefly explain this exhibit, first taking up the divisions into which you have classified this work and the quantities, and afterwards the matter of prices, shown at the foot of the page?

A. This statement of grading, clearing and grubbing is divided into acres of clearing, square rods of grubbing, total cubic yards, earth marked "O, cubic yards," earth marked "1, cubic yards," earth marked "2, cubic yards," earth marked "3, cubic yards," "hard-pan, cubic yards," "loose rock, cubic yards," "solid rock, cubic yards"; and under each of these items for each section are the quantities of the different items, and at the foot of the statement is a summary of the total quantities with the prices and the amounts.

Q. Column No. 3, entitled "Total cubic yards," if I understand it, is the sum of the different classes of earth, hard-pan, loose and solid rock work shown in the following columns.

A. Yes, sir.

Q. State now how you arrived at these quantities.

A. The quantities of grading are arrived at in four different ways: First, the quantities for which contractors were paid on original construction—

Q. From what source did you get those quantities?

A. From the records in our office—second, from profile estimates; third—

Q. Wait a minute. State what you mean by that.

A. Under that column is included quantities estimated from profile for portions of the line where we had no original quantities paid the contractors.

Q. By "profiles" you mean that you have the original pro-

files or matters of that kind in your records upon which to base an estimate?

A. Yes, sir.

Q. Proceed.

A. The third source of grading quantities is extra work done since construction, which we have of record. Those quantities are all a matter of record in our department. And the fourth source includes extra work done since construction which is not of record.

Q. You have the line in the paper now in your hand divided again into 46 different sections?

A. Yes, sir.

Q. And against each section are figures in one or the other of the columns you have referred to. I notice, to illustrate, that in one or two places you show work done under each of the columns, as, for instance, on the section from Cloquet to Deer River you show certain cubic yards arrived at by profile estimate, and also an additional quantity arrived at by extra work on record. Is there any duplication of these quantities?

A. No, sir.

Q. What does that profile estimate refer to?

A. That refers to a part of the line of which we have no quantities originally paid contractors, and for that portion we made a profile estimate of the line as it originally existed.

Q. You had an old profile, you mean, upon which to base the estimate?

A. We have a correct profile of the line as it originally was built.

Q. And then the amount of work shown as extra work was done subsequent to and in addition?

A. Yes, sir.

Q. So there is no duplication in the figures in that regard?

A. No, sir.

Q. Will you state the percentage of quantities that are

shown under these different tables? for instance, the quantities for which contractors were paid on original construction, what percentage of the total quantities claimed for this work is covered by that?

A. 43 per cent of all of the grading quantities are obtained from our records and represent the quantities for which contractors were paid on original construction.

Q. Proceed.

A. 23 per cent of the total quantities represent quantities obtained by profile estimate; 30 per cent represent quantities obtained from our records of extra work done since construction; and 4 per cent represent quantities of extra work done since construction not on record.

Q. Then, do I understand that all but 4 per cent of these quantities are derived from the records, in whole or in part, the part being the estimate based upon a profile in your records?

A. Yes, sir.

Q. Speaking of the 4 per cent of extra work not on record, what does that comprise and how did you arrive at that?

A. That covers grading done since construction for which quantities are not on record covering side-tracks, bank-widening, bridge-filling, sloping cuts, ditching, etc.; and is made up from my knowledge of the lines and what has been done to them and not covered by quantities on record.

Q. Will you state whether, in your judgment, the figures shown in the exhibit or paper are accurate?

A. I consider them as accurate as possible to get the grading in Minnesota.

Mr. HOLDEN: We offer in evidence this paper which is marked Complainant's Ex. 3-Hogeland.

Q. The total number of cubic yards shown in Ex. 3-Hogeland, 61,363,800, that is the footing of the third column on item No. 2 of your exhibit No. 2 and represents the total quantity of grading, clearing and grubbing in the state of Minnesota,

or does it include grubbing and clearing?

A. No, sir; it just represents the grading, the total of grading.

Q. Now, will you indicate what is the basis of the four classifications of earth-work into "O," "1," "2," and "3"?

A. That represents a separation of the earth-work in Minnesota for the different lines on the basis of what in my opinion it would cost per yard to handle that earth.

Q. What character of grading work do you denominate as earth No. "O"?

A. That includes the most favorable material to move, earth material, and would cover lines in Minnesota that are graded practically altogether from the side, by borrowing from the side, and would cover a number of the lines in the Red River valley where the fill is comparatively low and uniform in height, and constitutes the easiest part of the earth work. That has been put in at 18 cents a yard. Earth No. "1," includes earth-work on lines where the grading is a little more difficult, by reason of either the fills being somewhat higher or a few cuts to be hauled out, or the material itself not quite so favorable for handling. That has been put in at 23 cents. Earth No. "2" covers the earth-work on lines that are still a little more difficult, where the cuts are deeper, fills higher, but still the material is not so difficult to handle as in the next class. For that class, No. 2, the earth work has been put in at 31 cents a yard. The fourth class, marked "Earth No. 3" has been put in at 39 cents a yard and covers the most difficult earth-work that we have to handle in Minnesota,—for instance, the line on the Range, where the material is largely clay, or through the swampy country, where the most difficult material is handled, the district around the head of the lakes.

Q. Now, Mr. Hogeland, will you state how you have arrived at the prices shown on this table?

A. They are made up to represent my judgment of what the

grading would cost, and based on what work of that kind has cost us.

Q. To what extent have you examined your records to determine what work of that kind has cost you?

A. I have gone through our records of grading since 1898, and have drawn off a table showing what it has cost us. This covers the moving of nearly 47,000,000 yards of material; and I have shown on this table the average contract price for each piece of work for each class of material and also what the work has actually cost, after all items of extra work (overhaul, transportation, etc.,) have been put in, and from this table we can figure what should be added to contract prices to cover the entire cost of grading.

Q. How many miles are involved in these figures?

A. This covers 1553.2 miles of main track.

Q. Does it cover work both in and out of the state of Minnesota?

A. Yes, sir; it covers practically all of the contract work done by the Great Northern Company since 1898.

Q. Now, will you state what result you arrived at on that examination in the way of prices?

A. Possibly it would be well to explain a little more fully just how the different items were arrived at.

Q. Yes, I wish you would make it sufficiently full to make the exhibit clear, and then state the net result of it.

A. The first column shows the year in which the lines were built; the second column the name of the line; the third column the mileage; the fourth column the cubic yards of earth for which contractors were paid; the fifth column represents the average price paid contractors for such earth-work; the sixth column represents the number of cubic yards of hard-pan for which contractors were paid; the seventh column represents the average price paid contractors for such hard-pan; the eighth column represents the cubic yards of loose rock for which

contractors were paid; the ninth column shows the price per cubic yard for such loose rock; the tenth column shows the number of cubic yards of solid rock for which contractors were paid; the eleventh column shows the price per cubic yard for such solid rock; the twelfth column shows the total yardage—which means the sum of earth, hard-pan, loose rock and solid rock; the thirteenth column represents the average price paid contractors for all classes of material,—that is, it is obtained by dividing the total amount paid contractors for the items previously mentioned by the total yards, which gives an average contract price for every yard of material; then the fourteenth column represents the total charges on our construction books against grading for each of these lines at the time it is turned over for operation; that is, it will include, in addition to what was paid contractors for earth, hard-pan, loose rock and solid rock, whatever was paid for overhaul, extra bills of every nature, transportation, etc. Then the fifteenth column is an average price per yard for all classes of material, obtained by dividing the total grading charges by the total yardage. In that way, by comparing columns 13 and 15, we can ascertain what amount should be added to the contract prices to cover the actual cost of the work. Now from that table we find that, covering the 1553.2 miles, there are 28,675,436 cubic yards of earth, for which the average price paid contractors was 19.3 cents per cubic yard; there were 9,087,261 cubic yards of hard-pan, for which the average price paid contractors was 34.6 cents per cubic yard; there were 3,129,458 cubic yards of loose rock, for which contractors were paid an average price of 40.7 cents per cubic yard; there were 6,011,326 cubic yards of solid rock, for which contractors were paid an average price of 95 cents per cubic yard. The total yardage amounts to 46,903,481 yards and the average contract price, covering the classes of material mentioned before, is 33.4 cents per cubic yard. The total charge in our construction books for this grad-

ing at the time the lines were turned over for operation is $21,027,679. Dividing this by the total number of yards handled gives an average cost per yard of 44.8 cents. Comparing this with the 33.4 cents actually paid contractors shows that we must add 11.4 cents per yard to the average contract prices to obtain what it actually cost.

Q. Are the figures on that paper you have been testifying to accurate in your judgment?

A. Yes, sir.

Q. Taken accurately and carefully from your records?

A. They are taken from our records and I consider them strictly accurate.

Mr. HOLDEN: We offer this in evidence, which has been marked Complainant's Ex. 4-Hogeland.

Q. If I understood your answer a few moments ago, the prices which you have shown on the sheet of Ex. 2-Hogeland are based both upon those actual figures and also upon your present judgment from your experience as to what the different classes of work would cost?

A. It is proper to say that that statement was completely compiled after I had made up my statement as shown on item 2 as to the cost of reproduction and that it confirms the prices which we have used, and in every instance would justify a somewhat higher price except in the case of solid rock.

Mr. HOW: In your answer which refers to "that statement" you mean Ex. 4, the last statement, which was compiled subsequently to Ex. 2?

WITNESS: Yes, sir.

Q. Will you explain just what you mean by your reference to solid rock price?

A. The price I have used for solid rock in Minnesota is $1.25 per cubic yard. On Ex. 4 the average price for rock on the 1553 miles mentioned is 95 cents; so that if we add the constant 11.4 cents it would make the price $1.064. On the other hand,

if we pick out the Minnesota lines from this statement, the average price for rock as paid contractors is $1.027. If we add to that the 11.4 cents constant, it would bring the price of rock for Minnesota to $1.141, which is still a little less than what I have used; but my judgment is the price of rock on our lines in Minnesota, considering the nature of the rock, and how it would have to be moved, is worth $1.25, which we have used.

Q. Is there any particular portion of the line where you would encounter solid rock in reproducing?

A. Out of the total of 440,453 yards of solid rock in Minnesota we have 159,750 yards in Minneapolis. This is the largest amount in any one line.

Q. Approximately one-third of the total quantity of solid rock in the state?

A. Yes, sir. The contract price paid for that was $1.14, and I think it would cost that much to move it now, considering the blasting that would have to be done in a large city.

Q. The contract price was $1.14?

A. Yes, sir.

Q. Without any addition of extra expense?

A. Yes, sir; I don't think it could be done for that price now.

Q. Will you explain just what you mean by your reference to a "constant" as an addition to the contractor's price?

A. I mean by that a certain figure that it is necessary to add to the prices paid contractors for the various classes of grading work to actually cover the entire cost of the grading; that is, it would cover overhaul, extra bills of every nature which are not paid contractors by the yard and which are properly chargeable against grading, transportation of men, tools, grading outfits, etc.; in fact, every bill of every nature incurred in the grading and properly charged against grading which is not paid to the contractors at their contract price per yard.

Mr. THORNE: And you have ascertained the average in-

crease of cost per cubic yard to be added to the price paid contractors by this Ex. No. 4, which covers 1500 miles of grading, or 1500 miles of road on which grading has been done in the last ten years?

WITNESS: Yes, sir.

Mr. THORNE: Ascertained it by your actual work, the actual cost in all that volume of work?

WITNESS: Yes, sir.

Q. The prices shown on the sheet marked Item 2 of your Ex. No. 2 for clearing and grubbing, will you briefly refer to those and state the basis?

A. The items of clearing and grubbing are taken, as far as possible, from our records of the work done during original construction, and where that could not be obtained to represent accurately the amount of clearing and grubbing that has been done up to date on the lines, we estimated the amount from our maps and profiles, and I believe it very closely represents the actual clearing and grubbing that it would be necessary to do to reproduce the lines. The prices are based on average contract prices.

Q. I now show you another map, which appears to be a tracing from the State Commissioner's map, and which shows the lines of the Great Northern road in a uniform color and in the forty-six sections, if I understand it correctly, into which you have divided the road in making your figures; is that true?

A. Yes, sir; this map shows in red the Great Northern lines in Minnesota; each section as shown in Ex. No. 2 being shown on the map.

Map marked for identification "Complainant's Ex. 5-Hogeland."

Q. Item No. 3 of your Ex. No. 2 embraces protection work, riprap and retaining walls. Will you briefly indicate the way in which the quantities and the prices shown on that page were arrived at?

A. The quantities were obtained from our records, and, where they were not complete, from actual measurements on the ground. The prices are based on average contract prices, to which is added the necessary additional cost for train service or transportation.

Q. Those quantities which you say were measured, they were measured for the purposes of these proceedings, were they not?

A. Yes, sir.

Q. And by competent men?

A. Yes, sir.

Q. Under the jurisdiction of the division engineers?

A. Yes, sir.

Q. In your opinion, are the quantities, figures and prices shown on that page accurate and reasonable?

A. Yes, sir.

Q. And based on actual quantities and actual prices shown in your records?

A. Yes, sir.

Q. The next item is tunnels, to the effect that there are none in the state of Minnesota. Now coming to Item No. 5, cross-ties and switch ties, you have again taken the 46 divisions; and I wish you would briefly state the method which you used to arrive at the quantities and prices.

A. The quantities are arrived at by count made of short pieces of track, on various sections, generally, covering both main track and side-track; also checked against our record of the number of ties used on the different lines, as they were built, and correction has been made by cutting out switch-ties and ties on bridges, the latter being considered as a part of the bridge and included in other items. Switch-ties are obtained from actual count of the number of switches. The same is true of railroad crossings.

Q. At the foot of this page you have divided your cross-ties

into different kinds of timber; upon what has that been based,—the actual records of your office?

A. That is based upon information furnished by the road-masters on each division, and shows as nearly correctly as possible the different classes of cross-ties in track.

Q. That information was compiled and procured for the purposes of this exhibit, was it not?

A. Yes, sir.

Q. That is true of switch-ties and railroad crossing ties, the actual quantities were ascertained?

A. Yes, sir.

Q. Now, then, the question of prices?

A. The prices are based on what it has cost us for ties in the past.

Q. The source of supply of oak ties, if I may interrupt you for a moment, is where?

A. We would not be able to obtain the number of oak ties to replace those in track from Minnesota, and I doubt if we would be able to obtain them at all, but if they were obtained they would have to come from the South, in my opinion. In fact, I believe it would be a difficult matter to obtain in Minnesota, within the period that the lines would be reproduced, the number of ties that would be required at the prices which I have indicated, taking into consideration the requirements of other railway lines which would necessarily have to be built at the same time.

Q. What have been the tie prices in the past few years?

A. They have gradually been rising; and that is due to the scarcity of timber. Tie timber in Minnesota is becoming rapidly exhausted.

Q. In your price shown here, what is included in addition to the cost of the tie itself? How is the price made up?

A. Well, it would include the price paid to contractors for ties, plus any charges for peeling and handling and placing them

on cars ready for shipment.

Q. But freight charges are not included in these prices?

A. No, sir; freight charges are included in a separate item; freight charges on ties and other track material are included in item 36.

Q. State whether or not, in your opinion, based upon your experience, the prices shown of different kinds of cross-ties, switch-ties and railroad crossing ties, shown on this page, fairly represent what the cost of those would be for reproducing the system in the state of Minnesota.

A. In my opinion, they do.

Q. Your next item (6) has reference to ballast, and for the 46 different sections in the state shows a total quantity of 6,228,000 yards at a price of 62 cents per yard. Will you briefly state how that page is made up as to quantities and price?

A. The quantities are made up from our records and actual measurements of the amount of ballast under the track on the different sections. The price is made up from my judgment as to what the work would cost; and I have fortified my judgment by preparing a statement of what it has cost us to place nearly 2,000,000 yards of ballast during the past eight years on newly constructed lines.

Q. I hand you this paper, and ask that it be marked Ex. 6-Hogeland. Will you briefly state what it shows?

A. The statement is headed "Actual Cost of Ballasting, Lines constructed 1901-1908, as shown by Construction Books." The first column shows the date the work was done; the second column the line; the third column the mileage of each line; the fourth column the cubic yards of ballast placed; the fifth and sixth columns represent train service; the fifth column being charges and the sixth column the cost per yard for train service; the seventh and eighth columns show labor, tools and supplies, the seventh column being the charges and the eighth column

the cost per yard; the ninth and tenth columns show repairs of equipment, the ninth column being the charges, the tenth column being the cost per yard; the eleventh and twelfth columns represent pit tracks; the eleventh column being the charges, and the twelfth column the cost per yard; the thirteenth and fourteenth columns represent stripping pits, the thirteenth column being charges and the fourteenth column the price per yard; the fifteenth and sixteenth columns represent transportation, the fifteenth column being the charges and the sixteenth column the price per yard; the seventeenth and eighteenth columns represent the total charges, the seventeenth column being charges, the eighteenth column the price per yard. These columns are added and produce the following totals; total mileage 734.42; total cubic yards of ballast, 1,960,065 yards; for train service total charges $326,636.56; average price per yard 16.5 cents. For labor, tools and supplies, total charges, $739,505.62, making an average price per yard of 37.7 cents. The repairs of equipment, total charges $54,029.51; average price per yard 2.8 cents. Pit tracks, total charges $28,563.34, average price per yard 1.5 cents; stripping pits, total charges $29,054.44; average price per yard 1.5 cents. Transportation charges $122,267.53, average price per yard 6.2 cents; total charges $1,300,057, giving an average total cost per yard of 66.3 cents. In this statement the charges for "Rental of Equipment" as shown in the construction books have been cut out. Instead thereof, it would be proper to add an item for depreciation of equipment.

Q. Have you added such an item?

A. I have not.

Q. And by "equipment" you mean the equipment used in the ballasting work?

A. Yes, sir; under "Train service" is included all the train service for loading, hauling and unloading ballast.

Q. Now, if I understand you, all the information shown on

this Exhibit No. 6, is based upon your actual records taken from your books?

A. Yes, sir.

Q. And covers for a period of from 1901 to 1908 as shown on the statement?

A. It covers all of the ballasting done on newly constructed lines within that period.

Q. Your price shown on that item No. 6 of Ex. No. 2, is 62 cents?

A. Yes, sir.

Q. That is 4.3 cents lower than your average price shown on Ex. No. 6?

A. Yes, sir.

Q. And in your judgment is the price shown on item No. 6 of 62 cents a reasonable and proper figure to be used in that connection?

A. I consider it very reasonable, and I believe if I had made this statement before I had prepared that, I would have used a larger price.

Q. Well, you prepared the sheet covering item No. 6 before you had these details worked out from your own record?

A. Yes, sir.

Q. Passing to Item No. 7, which seems to cover the subject of rails, those are divided into main line, side line and side-tracks?

A. Yes, sir.

Q. Proceed.

A. It is divided into main line, side-tracks, less tons in frogs and switch points, and shows the total rail by tons in each section; and at the foot a summary is made producing a total of 299,305.01 tons.

Q. How did you arrive at these quantities in main and side-tracks?

A. They are arrived at from our records of the rail in tracks

as they existed at the time the valuation was made.

Q. The price of $30.75, how was that made up?

A. That is based on 60,000 tons of rail purchased by the Great Northern Company during 1908, the average price of which, delivered at St. Paul and Superior, was $30.47 per ton, to which I have added 28 cents per ton for inspection and handling.

Q. Is that a proper and reasonable charge?

A. I consider it so.

Q. And therefore the price of $30.75 rests upon your actual experience in the year 1908 in the purchase of 60,000 tons of rail?

A. Yes, sir.

Q. The next item, No. 8, covers track fastenings, will you briefly describe that?

A. That is made to show for each section by tons, the angle-bars, bolts and spikes and the number of tie-plates, a summary being made showing for angle-bars 22,506 tons; for bolts, 2,535.32 tons; for spikes 8,670.45 tons, and for tie-plates 6,030,300.

Q. Those quantities have been ascertained how?

A. Those quantities have been ascertained from our records of the kind and number of angle-bars, bolts, spikes and tie-plates existing in each line.

Q. And are actual quantities, based on records, I understand?

A. As far as it is possible to do so.

Q. Now, then, your prices?

A. The prices are arrived at on the average prices paid during the year 1908, to which a very small addition has been made for inspection and handling, on the same basis that was made for rails.

Q. In your judgment, the prices for rails and track fastenings fairly represent what it would cost, in your judgment, to

purchase that quantity of material?

A. Yes, sir; and place it on cars at either St. Paul or Superior. It includes whatever handling would be necessary from docks to cars, or re-handling from car to car at either St. Paul or the head of the lakes.

Q. The freight charges are handled in a later item?

A. A separate item.

Q. Your Item No. 9 includes switches, frogs and railroad crossings; have the quantities there been arrived at from records and count?

A. Yes, sir; in both ways, from records and count.

Q. And the prices?

A. The prices represent the average prices for each class of material during the year 1908.

Q. Those prices are actual and those quantities are absolute?

A. Yes, sir; yes, sir.

Q. Item No. 10 embraces track-laying and surfacing; the first column adds up the total amount of mileage in the state of Minnesota, does it not?

A. Yes, sir.

Q. The second column of switches?

A. The second column shows the number of switches in the state of Minnesota; the third column the number of railroad crossings.

Q. These are all actual quantities?

A. Yes, sir.

Q. Now, then, take up the matter of prices, briefly.

A. Opposite the miles of track, in order to arrive at track-laying, I show a price of $835 per mile; opposite switches $25 each; opposite railroad crossings, $45 each. The price of $835 per mile for track-laying is based on my judgment and experience, and I have a statement showing what work of that kind has actually cost us in construction work during a period of

ten years past. That statement isn't here, we didn't have it prepared; we will have that this afternoon.

Mr. HOLDEN: The statement you refer to will be offered later in connection with this item No. 10 of Ex. No. 2.

Q. From those two sources of information, it is your opinion, if I understand you, that the prices shown for track-laying and surfacing are reasonable?

A. Yes, sir.

Q. Item No. 11, bridges, trestles and culverts; the exhibit seems to show the different kinds of railway and highway bridges, steel and wood, also the permanent and temporary culverts in the state of Minnesota. All of the quantities are, as I take it, from exact records or count, are they not?

A. Yes, sir; the quantities are from actual records.

Q. Will you state briefly upon what you base your steel railway bridge prices?

A. The unit prices for steel railway bridges, for all except truss spans, based on $60 per ton for steel at St. Paul; mill and shop inspection 60 cents, erection $12.50, painting $1.50, work-train service, unloading, extra handling, use of equipment, freight, false work, etc., $5.40, making a total of $80 per ton. For truss spans, an addition to this price is made of $5 per ton for the steel at St. Paul, ($2 a ton for erection, and $3 a ton for false work,) making a total addition of $10 per ton, or $90 per ton for steel truss spans, erected.

Q. To what extent are those different statements of cost based upon actual experience?

A. They are based on our actual experience during the year 1908. That covers the steel. Our unit prices for first-class masonry are $10.50 per cubic yard, for second-class masonry $7 per cubic yard, and for concrete $7 per yard.

Q. Is that based on actual experience?

A. That is based on actual experience.

Q. By that I mean, the actual prices you have paid within

the last year for that kind of work.

A. Yes, sir; it is based on the actual prices paid during the year 1908.

Q. For work done in the ordinary course of railroad construction and repair work?

A. Yes, sir.

Q. Are the other prices shown on item No. 11 arrived at in the same way that you have just stated?

A. Yes, sir; they are based on actual prices paid during the year 1908.

Q. So that what you have stated as to steel bridges applies to all the other kinds of bridges and culverts shown on the page?

A. Yes, sir.

Q. I notice section 44 seems to cover the Minneapolis Union Railway and has reference to a stone arch bridge of $867,000. What have you to say as to that figure?

A. That is based on the actual cost of the structure using present-day prices for the various classes of work. It was erected at a time when labor and material were much cheaper than they are at present. For that reason it is necessary to make necessary corrections in the original construction cost.

Q. So that figure represents your judgment as to what it would cost today, using your experience in prices, to reproduce that bridge?

A. Yes, sir.

Q. The next item embraces track and bridge tools; the 46 sections of the road seem to have 363 sets at a price you have stated of $150; that is an actual count of the number, I take it?

A. Yes, sir; and it is an average price per set.

Q. How did you arrive at that price?

A. By what the average cost of the tools for these crews, according to our experience in the last year.

Q. Item 13, fences, cattle-guards and signs; this page seems to show right-of-way fence, snow-fences, cattle-guards, highway crossings and signs; how are the quantities arrived at?

A. The quantities are arrived at from actual records or count, and the prices are from what the work has actually cost us during the past year.

Q. Item 14, stock-yards and appurtenances.

A. It is made up to show the items of this kind that actually exist on the road in Minnesota and the cost of reproduction of these items for each section.

Q. And that cost of reproduction is based upon what?

A. Based upon our actual experience during the past year.

Q. The next item is 15 water stations; is what you have just said in reference to stockyards substantially true as to water stations?

A. Yes sir; it is made up with reference to the number of water stations and the cost of reproduction of each based on what it would cost to do this work last year.

Q. And during that period of time, you did build water stations, did you, and you arrived at actual figures?

A. Yes, sir; from those actually built we arrived at unit prices.

Q. Item No. 16 includes coal stations, divided into chutes and platforms?

A. Yes, sir.

Q. Those quantities are absolute, and the figures of prices based, as you have stated, upon actual experience in the last year?

A. Yes, sir.

Q. Item No. 17, station buildings and fixtures; you have classified those into passenger and freight and loading platforms, and the passenger stations into brick or stone, and frame or combination?

A. Yes, sir.

Q. Now, speak briefly of the brick or stone passenger stations and the method you used for fixing a price.

A. The prices are based on what the buildings actually cost, with the necessary correction to bring the prices the same as the 1908 prices, and are based on what it actually cost us to carry out work of that kind during the year 1908. The same is true of the other classes of buildings listed in this item.

Q. These brick and stone passenger stations, did your office or those of the Company have records showing the exact quantities of the different material that had gone into the construction of them?

A. Yes, sir; we have plans showing each of these buildings, from which the quantities of various kinds can be ascertained, and from those quantities and the original cost of the buildings we have figured what it would cost to reproduce them.

Q. Speaking of your frame passenger and combination depots, how did you arrive at those—in the same manner?

A. In the same manner.

Q. Is that true of the freight depots and loading platforms?

A. Yes, sir.

Q. The number of each is actual, and the prices and values have been fixed in the manner you state, from plans and records in the office?

A. Yes, sir.

Recess until 2 o'clock P. M.

AFTERNOON SESSION.

Mr. THORNE: We have had this testimony entitled in both cases, the Kennedy case, and the James case, so that the cases will be consolidated and practically tried together; there won't be any question that the testimony is applicable to both cases.

The MASTER: Yes. This you say is entitled in both of the cases?

Mr. THORNE: In both of the Great Northern cases.

The MASTER: I suppose the bills are the same in each, are they not?

Mr. THORNE: The James case was subsequent, and a little bit more carefully drawn, a little more elaborate.

The MASTER: But it covers everything in the Kennedy case?

Mr. THORNE: Yes, and a little more, a little more carefully drawn.

By Mr. HOLDEN:

Q. We were at item 18 when adjournment was taken at 12 o'clock; that seems to cover Miscellaneous Buildings. Will you briefly state what that exhibit shows and how the prices were arrived at?

A. That is separated by sections, the same as the previous items, and shows under the different headings of General Office Building, Division Headquarters Buildings, Commissary Buildings, Grain Elevators, Section Houses, Bunk Houses, Handcar Houses, Ice Houses and Other Buildings, and gives the number and the value on each section.

Q. The number, of course is accurate, from an actual count of each of the different kinds of buildings shown in this different count?

A. Yes, from our records and the count of the buildings, and the cost represents the cost of reproducing them during the year 1908, based on similar work carried out in that year.

Q. The general office building is shown at $643,500.

A. That is based on actual cost of the building and furniture, with the necessary correction in prices to make it agree with present-day prices, the origiaal building having been put up when prices were very much lower than they are now.

Q. And the figures were based upon plans which are in your office, open to inspection, and the result is reached by applying prices of 1908 or present prices to the plans and specifications for that building?

A. Yes, sir.

Q. That is true of all of the other buildings, is it not?

A. Yes, sir.

Q. Item 19, Steam and Electric Power Plants and Gas Plants?

A. The different sections are listed where these plants are found, and the value of the building and machinery contained in each one is shown, and the whole added up, making a total of $413,752. That is also based on an actual inventory of what exists for that class of building; the machinery in these buildings has been valued by our mechanical department, the superintendent of motive power, and represents the cost of the reproduction of the machinery in these buidings as of 1908.

Q. And the prices are all based upon actual computations applied to the specifications and plans, showing the nature and character of each building and the amount and character of the machinery contained therein?

A. Yes, sir.

Q. And the application to those of actual prices?

A. Yes, sir; as prevailing during 1908.

Q. Item No. 20 embraces General Repair Shops.

A. That covers all of the buildings devoted to that purpose, and the statement shows the sections on which they are found, together with a detailed statement of the buildings with the cost of the reproduction of each.

Q. The first section into which the road was divided being that entitled "St. Paul to University Switch."

A. That would cover the shops at Jackson street and Dale street.

Q. The Jackson street shops seem to consist of a large number of buildings of various kinds, devoted to various purposes?

A. Yes, sir.

Q. The second column is a part of the Jackson street list of buildings as well as the first, is it not?

A. Yes, sir.

Q. And the Dale street shops embrace the first and second columns, also?

A. Yes, sir.

Q. That is true, also, of the shops at St. Cloud and at Barnesville?

A. Yes, sir.

Q. Now, will you detail, briefly, the method you used to inventory and appraise the value of the Jackson street shops, the various classes of buildings as shown in that list?

A. We took the plans of the buildings and took out the quantities of the various classes of materials and applied the prices prevailing during 1908, and we also compared results obtained in that way by the actual cost of the buildings, remembering that the prices of all classes of material had increased largely since those buildings were erected.

Q. But each building had attention by itself?

A. Had separate consideration; yes, sir.

Q. And the details of your computation and your entire records in this exhibit are in your office and open to the inspection of the counsel, if desired?

A. Yes, sir.

Q. That same method was followed as to each of the other repair shops shown on this list?

A. It was.

Q. And the results are an actual computation of actual quantities of material applied to actual prices?

A. Yes, sir.

Q. For that class of work?

A. Yes, sir.

Q. Turning back to item 20 for a minute, you show, for instance, the first building, Car Shops, $76,600; you have all of the details of that building in condition for examination and production, if necessary?

A. Yes, sir.

Q. Including the different items, the foundation and the superstructure, and the complete finish of the building?

A. Yes, sir.

Q. Item 21, Shop Machinery and Tools?

A. That is separated, like the previous items, to show the value of articles under this head for each section. It shows where the different shop machinery and tools are located, together with their value at each place.

Q. This list embraces shop machinery and tools in the different shops shown in the preceding item?

A. Yes, sir; as well as the number of other places where we have shop machinery and tools.

Q. How do you arrive at the prices of this machinery and tools?

A. These prices were prepared by the superintendent of motive power, but they represent the cost of reproduction of such articles, based on prices prevailing in 1908 and as they existed at the time of this inventory, June 30, 1908.

Q. And these prices have been applied to the actual number and quantity of machinery and tools as they exist in these various shops today?

A. Yes, sir.

Q. And the details of all that are in your records and open to inspection?

A. Well, that, I should say, was made by the superintendent of motive power, and it would be a part of his records.

Q. By "yours" I mean the railroad company records.

A. Yes, sir.

Q. And they are made by an actual inventory of the machinery and tools in the possession of the Company?

A. Yes, sir.

Q. Item 22, Enginehouses, Turntables and Cinder-pits.

A. This is divided in the same way as the previous sheets, showing the location of each structure listed as to the different

sections, and shows engine houses, turntables and cinder-pits at each place, with the cost of reproduction, and that is made up from actual records of the structures that exist and applying the prices prevailing in 1908, as the cost of reproduction.

Q. And these prices are all applied to the buildings that are now in actual use by the Company?

A. Yes, sir.

Q. And do not take into account anything but buildings and structures that are now actually existing?

A. Now actually existing.

Q. Track scales, shown in Item 23.

A. This is made up the same as previous sheets, showing the location of track-scales on the different sections, with the value of those on each section. It is also made up to show what track-scales actualy exist and the cost of reproduction, based on the prices prevailing in 1908.

Q. And the nineteen scales shown there are the actual number in active use as a part of the lines in Minnesota at the present time?

A. Yes, sir.

Q. Item 24, Docks and Wharves.

A. It shows the location of these and the size and the cost of reproduction of the three listed.

Q. And that item seems to be—

A. The one at Duluth.

Q. —the Duluth Terminal Railway?

A. Yes, sir.

Q. Just what is the Duluth Terminal Railway? You have included it as a part of the Great Northern System.

A. Yes, sir. That is known as section 43 in this valuation; it includes the line in Duluth.

Q. How do you arrive at the valuation of that dock, $35,000, in Duluth?

A. That is from the plan, and taking into account the

amount of material in it and applying the prices of 1908.

Q. You have a record of the plan that was made use of when that dock was constructed?

A. Yes, sir.

Q. As a part of your records?

A. Yes, sir.

Q. And you have applied the current prices for all the classes of work that would be called for to construct that dock in the year 1908?

A. Yes, sir.

Q. Turning back to your track-scales, for a minute, shown in Item 23, the list shown there, will you briefly describe just what one of those track-scales is; what is the length of it, for instance?

A. Well, they are not of the same length.

Q. Well, the going length at the present time.

A. They range from fifty to sixty feet in length, and a capacity ranging from about 80 to 120 tons.

Q. Has the size and capacity of track-scales been increased in recent years?

A. Yes, sir; it is due to the increased size and loading of cars.

Q. Do you know about whether it has increased as the result of any legislation enacted?

A. I couldn't say as to that.

Q. Well, this increase would result, would it not, in the discarding of the older and smaller scales that were previously in use?

A. Yes, sir; in a large number of instances.

Q. Have you taken any of those into consideration in figuring your prices and cost of reproducing track-scales?

A. No, sir; not at all; we have simply taken what we have in existence at the time this valuation was made.

Q. Item 25 includes interlocking plants; certain of them

seem to be of brick, the towers of brick, and others of wood?

A. That is made up the same as previous sheets to show the location as to section and the different details of interlocking plants as found on each section.

Q. Each of those plants when built was built upon a plan, details and specifications, was it not?

A. Yes, sir.

Q. And has each of those plants been treated in this statement as a separate proposition for the purpose of arriving at its present cost of reproduction?

A. Yes, sir; each one has been considered separately.

Q. And you have in your records the plans and specifications that you made use of for that purpose?

A. Yes, for nearly all of them; there may be a few that we haven't the plans for, but of such we had an examination made to show what the plant consisted of and to enable us to arrive at the cost of reproduction.

Q. And in your judgment the result shown there is accurate from an actual examination of the different structures and an actual application of going prices of the year 1908?

A. Yes, sir.

Q. Item 26 embraces signal apparatus?

A. This is made up in the same manner as the previous sheets, so as to show the location of different items on each section, and is divided as between block signals, crossing-bells, train-order signals and derails, and shows what is in for each one, in each section.

Q. Your prices were made up in the same way as in the preceding items?

A. Yes, sir.

Q. By applying actual prices that were paid in 1908?

A. Yes, sir.

Q. Item 27, telegraph lines and appurtenances.

A. That statement was made up by our superintendent of

telegraph and shows the cost of reproduction of the telegraph lines and appurtenances of that portion of each owned by the Railway Company in Minnesota.

Q. He supplied you with those figures and you have incorporated them into your report?

A. Yes, sir.

Q. I understand that you have not made an examination yourself of those figures in order to testify as to just what they consist of?

A. No, sir.

Mr. HOLDEN: We will produce a witness upon that point, if your Honor please.

Q. Is that also true of telephone lines and appurtenances?

A. Yes, sir; that is true of telephone lines and appurtenances.

Q. The statement was furnished by the superintendent of telegraph?

A. Yes, sir.

Q. He has jurisdiction over the telephone lines as well as telegraph?

A. Yes, sir.

Mr. HOLDEN: That is Item 28; we will also furnish a witness on that.

Q. Now we come to the item of contingencies, which is Item 29.

A. That is taken as ten per cent of the items listed, being grading, clearing and grubbing and the protection work, riprap and retaining walls, ballast, track-laying and surfacing, bridges, trestles, and culverts, fences, cattle-guards and signs, stock-yards and appurtenances, water stations, coal stations, station buildings and fixtures, miscellaneous buildings, steam and electric power plants, gas plants, general repair shops, engine houses, turntables and cinder-pits, track-scales, docks and wharves, interlocking plants, signal ap-

paratus, telegraph lines and appurtenances, and telephone lines and appurtenances, and is put in to cover the increased cost of the work due to all unforseen causes, such as fires, floods, tornadoes, accidents, strikes, etc. It amounts to ten per cent of $43,678,261, amounting to $4,367,826.

Q. Mr. Hogeland is it possible, in dealing with a problem of this kind, the reproduction of a system such as exists in the state of Minnesota, to include in the specific items all of the expense which ultimately goes into the reproduction of the road, or are there unforseen expenses which exist?

A. Yes, sir; in my opinion it is necessary to include an item of that kind to arrive at the figures that will come anywhere near representing what the actual cost of the work is likey to be.

Q. Well, does the term "contingencies" cover such items as well as expense which results from accidents and fires and floods and matters of that kind?

A. It is intended to cover the increased cost of the work due to all unforseen causes of that kind.

Q. And also unclassified items that may not be the subject of a specific class in themselves?

A. Yes, sir; whatever might have been unforseen or overlooked in making up a valuation of this kind and which you are likely to encounter in a matter of reproduction.

Q. I note that you have not included your percentage as to all of the items contained in the first page of the exhibit; will you state briefly the basis on which you proceeded?

A. Well, I have not included lands for right-of-way, yards and terminals; I have not included cross-ties and switch-ties; I have not included rails, track fastenings, switches, frogs and railroad crossings; I have not included track and bridge tools; I have not included shop machinery and tools. Those items which I have mentioned have not been included because I considered it was not fair to place a contingency on those items, but I did consider the contingency item should be placed on

every item in which labor entered to a large extent into the reproduction cost.

Q. It is a fact, however, is it not, that engineers generally make up their contingencies upon the basis of applying the percentage to all the items shown on the schedule?

A. In making up an estimate of cost of the new line you have in mind?

Q. Yes.

A. Yes, sir; in making a—

Q. Excepting the land, of course.

A. The usual method in making an estimate for a new line, after having detailed all items that an engineer from his previous experience can consider entering into the work, is to add a certain percentage on the entire cost so figured to cover contingencies. That percentage is not always taken the same by different engineers, or on different classes of work, different pieces of work.

Q. From your own experience, Mr. Hogeland, what have you to say as to ten per cent upon the items that you have made use of being a reasonable percentage for the purposes of this problem?

A. I consider it perfectly reasonable for this statement of reproduction. I would not consider it reasonable if we were starting out on a new proposition altogether; my experience has shown that ten per cent is not sufficient starting out with a new piece of work. My experience has been that in every instance, practically, we overrun the original estimate of cost where ten per cent has been used for contingencies.

Q. Have you in mind anything that might illustrate that proposition, in your construction work in the past?

A. As to new lines?

Q. Yes; I don't know whether you have it worked out so you can state the exact percentage that experience showed should have been applied, but cases where the contingency

item or the experience ran above what was anticipated?

A. Why, I think that has been true of practically all the lines we have built in the past ten years, that where estimates have been made up sometimes we have put in as much as fifteen per cent for contingencies, and we have practically always overrun the estimated cost based on that kind of an estimate.

Q. You mean you ran over the estimate which included the allowance for contingencies?

A. Yes, sir.

Q. Now, you differentiate, then, in this case between the building of a new line, projected line, and ascertaining the cost of reproducing the line as it exists today; what is the basis of that difference?

A. Well, I hardly think we are justified in using as much of an item for contingencies in making a reproduction cost as we are in starting with an entirely new problem.

Q. Why is that, and what are the conditions that make the difference?

A. Well, some of your elements of uncertainty have been probed into and found out.

Q. What are those, to illustrate?

A. Well, bridge foundations—which is a very uncertain element in a new proposition—has been pretty well determined in the construction of the railroad in which we are making the reproduction cost. That would be one item. If we had tunnels in Minnesota, it is a very uncertain thing as to what you will find in boring a tunnel. In a reproduction estimate that uncertainty has been somewhat exploded, so that you don't have all of the uncertainties to contend with that you would have on a perfectly new line.

Q. But those uncertainties which come from fires and floods, and stress of weather, strikes and accidents, what have you to say as to those?

A. In that you could not be guided by your previous experience.

The MASTER: How is that?

WITNESS: You could not be guided by your previous experience very much in items of that kind, because you are altogether likely to encounter an entirely different state of affairs.

Q. In the building of a new line in the grading and doing all of the preliminary work before the line is finally completed, what is the effect of weather upon that class of work, rain-storms and things of that sort?

A. Well, the ordinary rain-storms you would expect to get and that you would probably take into consideration; but any unusual floods could hardly be provided for.

Q. Well, doesn't experience, year in and year out, prove that those extraordinary weather conditions increase the contingency item?

A. Yes, sir; it adds to the uncertainty of the cost of doing the work.

Q. To illustrate with a case where a bad spell of weather comes on, it is not only expensive, the work, but undoes a good deal of the work that has already been put upon the ground, your men are all on pay and are standing idle during this weather condition; that is an item or a consideration, is it not, that enters into this increased expense?

A. Yes, sir; a contractor, however, in taking a piece of work usually figures on ordinary conditions, but he would not figure on such conditions as prevailed in Montana last June when large portions of all the railroads in that state were washed out. Our company alone entailed a loss to road-bed amounting to about three-quarters of a million of dollars, in the floods in June in Montana. Now, an occurrence of that kind coming during construction would be something that could not be foreseen and would be covered by an item of contingency.

Q. Do you know what the experience of the Chicago, Milwaukee & St. Paul with their new line was during that condition of weather?

A. They were very badly washed out and put to a very large increased expense on that account.

Q. A great many miles of their new road got away and new construction was badly damaged?

A. Entirely washed out. Another instance would be the fires that took place last season between Fernie and Michel. We had a piece of line there that had hardly been completed, hadn't been turned over to the operating department, and it was necessary to rebuild practically all of the bridges as well as renew a large part of the ties, due to that fire. That entailed a loss of approximately $100,000, and it was something that could not have been foreseen in any kind of an estimate that any engineer would make.

Q. There was a fire in Minnesota some years ago, the Hinckley fire, that had a disastrous effect?

A. Yes, sir. If the reproduction of the lines in Minnesota had been in progress at that time, that would have entailed a tremendously increased cost, which no engineer could have foreseen.

Q. The element of accidents, that is to say, not only accidents to the property or to the equipment, but personal injuries and things of that kind, are just as constant in the problem of reproduction as they are in the problem of a new road, in your opinion?

A. Just as likely to happen.

Q. And the question of strikes, labor difficulties?

A. Yes.

Q. Well, now, then, to sum up all of the considerations, some of which you have indicated as existing in your mind, is it your opinion that ten per cent of the items which your list covers is a fair and conservative charge for contingencies in the reproduction of the Minnesota lines?

A. I think it is very fair and conservative; it is certainly none too large.

Q. Your next item, 30, embraces engineering, superintendence and legal expenses. Will you state the basis on which that estimate is made?

A. It is based on experience, and I think represents as nearly as possible what that item would amount to.

Q. You have applied the percentage of 4½ per cent to the first twenty-nine items; that covers all of the items preceding. Is that percentage one that can be said to be usually accepted in engineering circles and among engineering men as the conventional figure?

A. It is an item that varies a great deal, but is very often used, and I consider for this purpose that it is a very fair figure.

Q. You mean the percentage which you have used?

A. The 4½ percentage, the percentage that we have used.

Q. And your opinion is based upon your experience and knowledge of the present-day use in making up estimates for projected work and building of new lines?

A. Yes, sir.

Q. New locomotives, Item 31.

A. Item 31 covers locomotives and is separated according to the classes of locomotives, and includes all of those owned by the Great Northern Company at that date, June 30, 1908. This statement, so far as the details of the number, weight and value, was prepared by the superintendent of motive power, and amounts, for all the locomotives of the system, to $16,210,048; the portion of that reproduction cost chargeable to Minnesota is obtained by proportioning the locomotive mileage in Minnesota for the year ending June 30, 1908, to the entire locomotive mileage of the system. That is, the locomotive mileage in Minnesota for that year was 33.74 per cent of the total locomotive mileage for the system; therefore, that percentage of the total cost of reproduction is used and gives a value for the locomotives in Minnesota of $5,469,270.

Q. Is it your opinion that that is a fair method for apportioning the cost of reproducing the locomotives to the state of Minnesota?

A. I think it is. I don't know of any other method that comes as near the truth as that.

Q. The details of the statement of values were not prepared by your office?

A. No, sir; they were prepared by the superintendent of motive power.

Mr. HOLDEN: We will produce a witness as to that.

Q. Item 32—passenger equipment.

A. Is made up in the same way, by the superintendent of motive power, and shows the various classes of passenger equipment, divided, and the value given for each item, the total amounting to $5,810,775. That covers the entire system. The part chargeable to Minnesota is arrived at in the same way as for locomotives; that is, the passenger car mileage for Minnesota for the year ending June 30, 1908, is found to be 32.46 per cent of the total passenger car mileage for the system; therefore, that percentage of the cost of reproduction of the entire passenger equipment is used, giving an item of $1,886,178 as the cost of reproduction of the passenger equipment for Minnesota.

Q. The freight car equipment on the next statement is appraised and divided in the same way?

A. It is divided in the same way, and made up in the same way, by the superintendent of motive power, the total for that class of equipment of the system being $32,464,727; and it is found that 38.23 per cent of that is chargeable to Minnesota, because that is the proportion that the freight car mileage for Minnesota bears to the total freight car mileage for the system for the year ending June 30, 1908.

Q. Your miscellaneous equipment seems to be divided upon a slightly different basis. In the first place, how was that

appraisal made?

A. In the same way. The valuation of the miscellaneous equipment was made in the same way, by the superintendent of motive power, and shows a total for the system of $1,481,772; the part of that chargeable to Minnesota is divided on the basis of main and side-track mileage. The reason for that is because this class of equipment is not used in any one year the same in the different portions of the system. One year it will be used very largely in Minnesota; another year pretty largely in North Dakota; another year pretty largely in some other state; therefore, the best method to divide that appears to be on the basis of total mileage; that is, the relation the mileage of main and side-tracks in Minnesota bears to the total mileage of main and side-tracks for the system. On that basis it would be 32.59 per cent of the total, amounting to $482 909.

Q. There is nothing shown under Item 35, marine equipment, as applicable to the state of Minnesota?

A. No, sir.

Q. Item 36, freight on construction material; what classes of material are embraced in that item?

A. That covers ties, rails, track fastenings, and is made that way to agree with the way Mr. Morgan asked to have made up for Minnesota, so as to separate it in the same way.

Q. Will you briefly state just how this item is made up?

A. We have blocked out a system or scheme of reproduction of the lines in Minnesota as shown on map Exhibit 1 and have established a material-yard for each section; then we have taken freight charges on ties, rails and track fastenings, from the assumed point of shipment, generally Cloquet for the ties, and either St. Paul, Minneapolis or the head of the lakes for the rail and track fastenings whichever would produce the most economical total freight charges.

Q. If I understand you (referring to that Exhibit No. 1) you develop, as we showed this morning, a concrete plan for re-

producing the line, and the lines colored in blue represent the work that would be done the first year according to that plan; now then, in working that out you say you would establish a point in the district covered by the blue lines where you would assemble your material, your ties, for instance during that construction, for your year's work?

A. Yes, sir.

Q. Your freight charges are based upon the delivery of the ties at that assembling point?

A. Yes, sir.

Q. Now, then, that would be true as to the succeeding year's work, on up to the last work in the eighth year?

A. Yes, sir.

Q. And you have figured these freight charges on the basis of a delivery at the central point of each of the sections of work embraced in the eight years' plan?

A. Not a central point necessarily.

Q. Not the geographical central point, but the assembling point?

A. We have assumed a material-yard for each section, endeavored to select a material-yard which would prove the most economical.

The MASTER: For each of the forty-six sections?

WITNESS: For each of the forty-six sections.

Q. And then what are these freight charges—they are the charges from the sources of the ties or the material to distributing points?

A. For ties, in every instance where they are not obtained locally, they are assumed to be shipped from Cloquet, and the freight charges are figured from Cloquet to the material-yard established for each section. For rail and track fastenings we have assumed that our rail and track fastenings could be delivered at either St. Paul, Minneapolis, or the head of the lakes, at practically the same price; so we have taken freight on those

items from whichever point would prove the most economical to the material-yard for each section.

Q. And your weight in pounds of ties and tons of rails and track fastenings are the same figures shown in the preceding sheets covering those items?

A. Where we did show it; we didn't show the weight of ties in the previous sheets.

Q. No, you didn't show the weight, that is true; you showed the weight in tons of the iron and rails.

A. Of the rails and track fastenings, etc.

Q. Now, is it your opinion that this computation of freight charges correctly and accurately represents the charges that would be incurred in distributing this material in the way you have indicated?

A. I think it does; we endeavored to work out a scheme for reproduction that would prove the most economical and in selecting our material-yards we had that in view, and I think we have succeeded in placing them so that we get the least freight charges.

Q. I notice you take Cloquet as the point of shipment of cross-ties. You have over a million of oak ties shown in your Item No. 5, and in the event you were to reproduce that number of oak ties, what point of shipment would you take?

A. I don't think it would be possible to get that many oak ties. I think in reproducing the line in Minnesota we would have to establish a tie-treating plant at Cloquet and take the less valuable timber and get our ties in that way; I think it would be the ony possible way to reproduce the lines in Minnesota. Therefore, I have assumed that our ties would come from Cloquet.

Q. But if they were to come from a hard-wood district your freight rate—

A. I would like to explain a little further; the reason I say that we would have to establish a tie-treating plant would be,

to come anywhere near getting as good ties in our track as we have now, by taking the poorer timber we get these days, it would be necessary to treat the ties to put them on anywhere near the same basis that the ties exist in the track now.

Q. Can you state what that adds to the cost of the ties?

A. It depends on the method of treatment, but it runs from 16 to 30 cents a tie.

Q. Just the cost of treating them?

A. Yes, sir.

Q. Now, to revert to the proposition, the oak tie is procured from the central part of the central states, as St. Louis, for instance, is a base, is it not?

A. I think St. Louis is about the only market where any oak ties could be obtained, but I doubt very much if the other railroads would permit ties to get away from there. I am pretty sure if we had oak ties up in this country we wouldn't want many of them to get out of the state.

Q. But what I mean is it would be fair, would it not, in figuring the problem, that if we were to reproduce the oak ties shown in your statement, to compute the freight charges on ties from St. Louis to these different points?

A. If we could get them.

Q. Yes, but that perhaps is a different question. But the charges, in that event, would be substantially larger than the freight charges from Cloquet?

A. Yes, sir.

Q. Item 37 covers general expenses; what is the amount of that item?

A. That covers all expenses of organization, general officers, accounting officers, and all other force necessary during construction which is not covered by "engineering and legal department expenses."

Q. During the period of construction, complete equipment of accounting officers is necessary, is it not?

A. Yes, sir; absolutely necessary.

Q. And generally would be of general offices?

A. Yes, sir.

Q. Is required to carry on the work?

A. First to start the organization and then to carry it through, planning for all of the work, every element that enters into the organization, the accounting and the general direction of the work other than what would be covered by engineering and legal expenses.

Q. The percentage you have used there is 1½ per cent; how did you arrive at that?

A. That is not based on any particular knowledge of my own. It is a percentage that has been found to be about right in making a valuation of this kind.

Q. Is it not a percentage that is in common use among engineers?

A. Yes, sir; it is in common use.

Q. Generally accepted as a proper percentage?

A. Yes, sir.

Q. Item 38: will you state the basis upon which that is worked out?

A. Item 38 covers interest during construction, and is estimated at 24 per cent of all items except equipment, and at twelve per cent of equipment; the twenty-four per cent is arrived at by taking four years at six per cent per year for the road items, and is based on the reproduction of the lines in eight years; and on that basis one-eighth of the money required to construct the lines would be provided each year, and by the time your lines were completed, all of your money would have been at interest for four years; and we assume a rate of interest at six per cent, which I believe is a conservative rate to apply to a purpose of this kind. On the equipment, we have considered that it would not be necessary to provide that so long in advance. You would necessarily have to provide what you

needed for your track laying and your ballasting, putting up your buildings and bridges and all work of that kind, but you would not necessarily provide the equipment required for commercial business until towards the completion of your line. We therefore thought it was fair to take our equipment interest at two years instead of four years.

Q. What have you to say as to the return which the property might bring in during this period of construction?

A. I don't think it would bring in anything. I think it would be very fortunate if any part of it paid operating expenses if you put on any commercial trains in advance of the completion of the entire system.

Q. Well, within what period would you believe that the commercial business would begin to bring in a return?

A. Certainly not during the period of construction.

Q. Well, now, just why is that?

A. In the first place, it takes time to build up your local business, and then I don't think the local business in Minnesota would pay very much towards returns for the lines; you would have to figure on building your lines through to a connection with the lines west in order to figure on revenue more than would pay operating expenses, especially until you had all of your local industries developed along the lines in Minnesota; and then, furthermore, any line that is under construction cannot carry traffic at any ordinary rates that might be charged; all the conditions are unfavorable; the roadbed is soft; the track is generally largely a skeleton track and you can't haul any ordinary trainload, so that if you attempted to do any commercial business during construction I should certainly say it would be done at a loss.

Q. What effect does it have on the cost of construction, construction trains and those items of cost, to be carrying on a commercial business?

A. It adds to the cost of construction.

Q. It delays the movement of construction trains, does it not?

A. Yes, sir; and therefore adds to the cost of construction.

Q. And in every way adds to your expense?

A. Yes, sir.

Q. Have you anything in mind in connection with this Company, your knowledge of it to indicate how long it takes a piece of new road to begin to show something above the cost of operation in the way of a return?

A. Well, that would be entirely different for different parts of the system. I know that on the line west of Pacific Junction it was more than eight years after construction was started before it was on a paying basis.

Q. Pacific Junction is located where?

A. Where the line to Seattle and the coast leaves the line going to Great Falls, Helena and Butte.

Q. And so, summing the whole matter up, the charging of 24 per cent in the manner in which you have explained, is, in your judgment, a fair and conservative charge, is it not?

A. I believe it is.

Q. Item No. 39, we will discuss for a moment.

A. That covers the value of material carried by storekeepers, and is made from an actual inventory as of June 30, 1908. It covers all kinds of track material and material for locomotives, cars, etc., which is necessary to carry on hand to carry on the operation of the lines in Minnesota.

Q. And the prices that have been used were—

A. They are made to represent the cost of that material as it is charged out by the storekeepers for the various purposes to which it is put.

Q. Based upon your common, every-day prices and method of doing business in charging it, through the storekeepers?

A. Yes, sir.

Q. Now, is the amount of the material shown in that item

anything more than reasonably necessary for the amount of lines in this state?

A. No, I think not; it is an item which varies from time to time, and at that time of the year it generally is as low as at any time of the year.

Q. So that the item there, if anything, is lower than it might properly be at other times?

A. At other times of the year I think you would generally find that item larger for Minnesota than is shown here.

Q. An efficient operation of the road requires a constant supply of materials of all kinds for replacement and use in operation?

A. Yes, sir.

Q. Item 40, what does that embrace?

A. Item 40 covers the money invested in lines under construction which are not otherwise included in the statement.

Q. Well, is there anything in particular that you care to say about that? It is rather a small item.

A. No, sir; I think it shows for itself.

Attorney General YOUNG: That means lines under actual construction, does it?

Q. What lines have you there in mind?

A. I think it is property of the Greenbush-Warroad line, on which track hadn't been laid, but grading had been done, and the right-of-way purchased.

Q. That is up in the northwestern part of the state?

A. Yes, sir.

Q. That was the condition of that line on June 30, 1908?

A. Yes, sir. There may be a little in there for some other work under construction on the range, but we have a number of lines there, short lines, that are under construction pretty much all the time, and there may be some item there, but my understanding is it is practically all the Greenbush-Warroad line, and I have the details of that, which can be furnished, if necessary.

Q. And that is not embraced in any one of the 46 sections?

A. No, sir.

Q. Item 41 is "Interest in terminal railways." What is the interest of the Great Northern in the Minnesota Transfer?

A. It is one-tenth; one-tenth interest in the total value or cost of reproduction of the Minnesota Transfer Railway.

Q. And in the St. Paul Union Depot Company?

A. It is one-ninth.

Q. And the figures you have shown here are—

A. Takes that proportion of the cost of reproduction of those systems as they have made them up and returned them, as I understand, to the Minnesota Board of Railway Commissioners.

Q. Now, Mr. Hogeland, turning to Item 10 of Ex. No. 2, which embraces track-laying and surfacing, have you prepared a further exhibit on that subject in order to determine the cost figures that you have used?

A. I have prepared a statement showing the actual cost of track-laying and surfacing on 1565 miles, built since 1898, in order to justify the price which I have used for track-laying.

Q. And that table is made up of actual records in the office of the Great Northern Company, is it not?

A. Yes, sir.

Q. And is accurate, as nearly as can be made, is it not?

A. I think so, yes, sir.

Q. From those records?

A. Yes, sir.

Mr. HOLDEN: We offer in evidence Complainant's Ex. 7-Hogeland.

Q. Will you just take up Ex. 7, in your own way, and state what it shows?

A. Ex. No. 7 is headed "Actual Cost of Track Laying and Surfacing Lines Constructed 1898 to 1908, as shown by Construction Books." The first column shows the year in which

the line was built; the second column the line; the third column the miles laid, (which means both main track and side-track); the fourth and fifth columns cover train service; the fourth column being the charges and column five the average per mile based on those charges; columns six and seven cover the cost of labor handling material and laying track, column six being the charges and column seven the average cost per mile based on those charges; columns eight and nine cover the cost of surfacing track, column eight being the charges and column nine the average cost per mile; columns ten and eleven show the repairs of equipment, column ten being the charges, column eleven the average cost per mile based on those charges; columns twelve and thirteen cover transportation, column twelve being the charges and column thirteen the average cost per mile based on those charges; columns fourteen and fifteen cover the total charges, column fourteen being charges and column fifteen the cost per mile based on those charges. Summing these up, we have the total mileage covered by the statement, 1565.87 miles; the total charges for train service, $323 071.42, producing an average per mile for this item of $206. The total for labor amounts to $748,072.70, and makes an average cost per mile for this item of $478. The total for surfacing track amounts to $320,394.72, making an average for this item per mile of $205. The total for repairs of equipment amounts to $17,693.05, making an average per mile for this item of $11. The total transportation charges is $29,933.04, making an average per mile for this item of $19. The grand total of all charges is $1,439,164.93, which makes an average per mile of $919. Now, this covers the putting in of switches. In order to eliminate that, we take out the 940 switches covered by this work, at our estimated cost of $25 each, amounting to $23,500, which leaves a grand total of charges of $1,415,664.93, which divided by the total miles laid makes an average per mile of $904. In this statement the charges for rental of equipment,

as shown in the construction books, have been cut out. Instead thereof it would be proper to add an item for depreciation of equipment, which I have not done.

Q. So that that would somewhat increase the figures, if it were done, and that would be proper to do?

A. Entirely proper.

Q. This exhibit, at the foot of it, contains a description of the character of each of these items, describing what is meant and included in train service and in each of the other items?

A. Yes, sir.

Q. You reach a net price of $904 per mile?

A. Yes, sir.

Q. And in your item No. 10 you have figured at $835 a mile?

A. Yes, sir.

Q. The allowance for switches is the same in each exhibit?

A. Yes, sir. I desire to say that item 10 in Ex. No. 2, covering track-laying and surfacing, was prepared before Ex. 7 had been completed; otherwise I would have been justified in using a price higher than $835 per mile for track-laying.

Q. Now, then, the details from the statement on Ex. 7 are all, as I understand you, matters of record in the office of the Company and open and accessible to counsel for the state and the engineering force for inspection?

A. They are.

Q. And these represent actual quantities, actual work done, and actual prices paid?

A. They do.

Q. As shown by actual book entries and papers on hand?

A. Yes, sir.

Q. Now, Mr. Hogeland, you have made use of prices of 1908 in a number of these items. Will you state, briefly, what is your judgment as to the fairness of the prices of that year in figuring the present cost of reproducing the lines in Minnesota?

A. I think they would be entirely fair. I certainly do not

think the prices during 1908 were inflated in any way.

Q. You think that no unfair result, both as to labor costs or other costs, would be shown in these figures by using the prices which the company actually paid for actual work and actual materials in that year?

A. No, sir; on the other hand, I believe that if anything, they were lower than prices which might reasonably have been used.

Q. Some classes of labor costs were lower than in preceding years, were they not, and in others there were perhaps no changes to amount to much?

A. As a rule, whatever changes there were were lower than the preceding year.

Q. I show you another statement, entitled "Great Northern Railway Company Cost of Reproduction of the System June 30, 1908." Will you state briefly what that embraces?

A. That embraces the statement of the cost of reproduction of the system as it existed June 30, 1908, and covers a main-track mileage of 6,760.66 miles; second track 147.57 miles; side-tracks 1,620.75 miles; or a total of all tracks of 8,528.98 miles.

Q. What method has been pursued in preparing this statement?

A. Practically the same method as pursued in making the statement of the cost of reproduction of the lines in Minnesota, although it is made up in different form so as to comply with the requirements of the Interstate Commerce Commission. The items are made to correspond with their system of accounts and not in the same way as we made up Minnesota as requested by Mr. Morgan.

Q. The net result, however,—

A. The net result would be the same as though it were made up in accordance with the items as specified by Mr. Morgan.

Q. To illustrate that, you have shown as your first item, engineering three per cent of road items, and your 34th item,

legal organization and other expenditures, three per cent road and equipment items. Upon the basis of the figures for the state of Minnesota the same items were shown and the same gross percentage of six per cent was shown. They were divided somewhat differently, were they not?

A. Yes, sir.

Q. In just what way?

A. On Ex. 2, showing the cost of reproduction of the lines in Minnesota, item 30 covered the engineering and superintendence and legal expenses, 4 ½ per cent; item 37 covered general expenses at 1½ per cent, or a total of 6 per cent. The statement under consideration, covering the cost of reproduction of the system has under item 1, engineering 3 per cent, and under item 34, legal organization and other expenditures, 3 per cent, making a total of 6 per cent. It is simply separated differently.

Mr. HOLDEN: We ask that this statement be considered in evidence and marked Complainant's Ex. 8-Hogeland.

The paper was so marked.

Q. This exhibit No. 8 has been made up under your supervision, has it not?

A. Yes, sir.

Q. And by the use of the records of your office and of the other offices of the company insofar and to the fullest extent that there are records covering these different items?

A. Yes, sir.

Q. Will you state your opinion as to the accuracy of the figures shown on the first page?

A. In my opinion they are as accurate as it is practicable to make them for a statement of this kind, and represent as fairly as possible the actual cost of reproduction of the System as of June 30, 1908.

Q. Has the same method been followed in arriving at the figures of the different items as was done in the case of the

Minnesota State figures?

A. The same method has been followed. It was not possible, however, to go into all matters with the minute detail that we went into the various items for Minnesota, but as I stated before, we have gone into them with sufficient minuteness to be reasonably sure that it is a fairly correct statement of what it purports to be.

Q. Following on the first page is a statement of the total mileage of the system including certain terminal lines which, I understand you, have been treated as a part of the Great Northern system?

A. Yes, sir.

Q. That statement of mileage is accurate, is it?

A. It is accurate as of June 30, 1908.

Q. Following upon that appear, on pages 3 and following, detailed mileage in each state; those figures are accurate, are they not?

A. Yes, sir.

Q. As of that date?

A. Yes, sir.

Q. I notice the name of the Minneapolis Western Railway in this and the other statement; what is that?

A. That is a switching line in Minneapolis and is treated as a part of the Great Northern System, the same as the other component parts.

Q. In all of your figures treated as a part of the Great Northern Company?

A. Yes, sir.

Q. That is true of several of the other lines that are carried under the names of "Terminal Railway" here?

A. Yes, sir; the other two mentioned being the Duluth Terminal Railway and the Union Terminal Railway of Sioux City.

Q. Attached to this exhibit is a map?

A. Yes, sir.

Q. A map showing the lines of the Great Northern road for the entire system, is it not?

A. Yes, sir.

Q. That is an accurate representation of the lines as they run with reference to the state lines, including, in green, in the state of Washington, the Spokane, Portland and Seattle Line,—which has already been referred to in the testimony in the Northern Pacific case, is it not?

A. Yes, sir; I understand so; and our interest in the Spokane-Portland-Seattle line is shown as item 39 on Ex. 8.

Q. And the figure there shown is what—the actual amount that the Great Northern road has invested in that road?

A. As of the date of June 30, 1908.

Q. We were saying this morning the work which you have been doing in connection with looking into the question of valuation began about three years ago in an accurate way.

A. It began in earnest three years ago. Previous to that we had made a number of estimates of the cost of reproduction of various parts of the system, but the work was not undertaken in earnest until three years ago.

Q. That was the time when the state made the call upon the roads to make a return. upon the blanks provided by the state?

A. Yes, sir.

Q. Following upon that there was the showing made for the Spokane case?

A. Yes, sir; about a year later; I think in May, 1907.

Q. Now, to what extent, during this intervening period of three years, have you given this matter your atttention?

A. Why, I have given it very constant supervision. I have had men working under me who were getting the facts and figures together, but it had my personal supervision during the entire time.

Q. Are the figures shown in the present exhibits which you

have produced identical with those shown in the previous reports and figures made one, two and three years ago?

A. No, sir.

Q. What has brought about the changes in the figures?

A. The more carefully we have gone into the matter the more we have found to put in, and in some instances we have changed and lowered items which we had in before, partly because they properly belonged under a different classification, but the more carefully we have gone into the subject various changes have been found necessary to prepare a perfectly fair statement.

Q. To what extent have you made an investigation of your own records to verify and aid you in making up your figures?

A. We have been constantly at work getting this information compiled from our records and from the accounting department records covering these various items that go to make up the valuation of both the System and the state.

Q. Since your last reports were made—I am speaking now of the report in the Spokane Case and the report to the State—there have been additions to the property, have there not?

A. Yes, sir.

Q. And that also accounts for some of the differences in the figures?

A. It does.

Q. And it has also been brought about by the amount of work and inquiry and examination of the problem that you have been giving during the last two or three years, examining the records, investigating by personal inspection the lines, especially in the state of Minnesota, and finally, as I think you said, resulting in an examination of practically all the mileage of the state within the last month or six weeks?

A. Yes, sir.

Q. Now, will you state, then, your judgment as to the figures shown in your Ex. No. 2, covering the state of Minnesota,

as to whether or not they are as nearly accurate as they can be made?

A. In my opinion they are as nearly accurate as it is possible for us to make them.

Q. Will you state the total of your Ex. No. 2 for the state of Minnesota?

A. The grand total is $157,348,856.

Q. For the entire System shown in your Ex. 8?

A. For the entire System the grand total is $549,253,317.

Q. And these figures, as I understand the drift of your testimony, embrace actual quantities structures and work that is subject of actual ascertainment, but there has been no effort to include in these figures quantities or structures or work that have been discarded or lost sight of or disappeared in connection with the property?

A. That applies to everything, except that on some lines that have been abandoned the grading items appear.

Q. What percentage, or what does that amount to in comparison with the whole?

A. I have taken off an estimate for the state of Minnesota, and it amounts to 401,900 cubic yards of grading, practically all earth-work; and for the System, it would amount to 6,195,900 yards. That covers the grading on stretches of line that have been abandoned, and the quantities are included in my valuation of either Minnesota or the System.

Q. When you say "abandoned" you mean in the making of line changes?

A. Yes, sir.

By Mr. THORNE:

Q. Is it a fact that in many cases where you have abandoned the original line it was necessary to have been constructed for the economical construction of the railroad?

A. I considered it so, and for that reason I included the quantities in my valuation.

Q. The proper and economical method of construction of the railroad was to have built that line first and then subsequently to have abandoned it in favor of a—

A. Yes, sir, it would be the most economical way, in my opinion, to reproduce it.

Q. To again make the first line first and then abandon it and make the subsequent line?

A. Yes, sir. These instances where I have included the quantities, the lines abandoned are altogether where in my opinion a temporary line is justified in first construction.

Q. Exactly—

A. And the entire work would be carried out more economically by doing that than otherwise.

By Mr. HOLDEN:

Q. That would be cases, would it not, where a curve was taken out or a short piece of track was re-made or re-located? You spoke, a minute ago, as if a line had been abandoned; you do not mean by that an entire line, you simply mean—State just what you mean.

A. I can illustrate that better by a change which was made between Hancock and Morris, in this state. The original line was built as a very light line, following the contour of the bluffs on the south side, crossing the Pomme de Terre river on a very low bridge and up again on the other side, using a maximum grade of 1½ per cent. In reproducing the lines I think that very thing would be done again, because the construction work to produce the line, as a first thought where it exists today, would necessarily increase the cost per yard very largely—to attempt to do that as a first construction. The line as now laid there is very heavy construction, and I fully believe that the most economical way to reproduce that, would be to build that stretch of temporary line first, to facilitate the getting in of the steam-shovels, the work equipment of all kinds, and to enable you to progress that much faster with your work beyond.

And in every instance where I have included the quantities of abandoned lines, it has been for a purpose of that kind.

Q. What was the total yardage, you say, involved there in the state of Minnesota?

A. 401,900 yards.

Q. That is out of a total of 61,363,800 yards in the state?

A. Yes, sir.

Adjourned until Wednesday, March 17th, at 2 p. m.

On the afternoon of Wednesday, March 17, 1909, Mr. ALBERT H. HOGELAND was recalled and testified as follows:

CROSS-EXAMINATION.

By Attorney General YOUNG:

Q. Mr. Hogeland, your Exhibit No. 2 is entitled "Cost of Reproduction of Lines in Minnesota." Will you please state just what you mean by the "cost of reproduction" of your lines in Minnesota?

A. To reproduce them as they existed at that date, June 30, 1908, in the same physical condition, as near as it would be possible to do.

Q. What conditions did you assume as surrounding the construction?

A. We assumed the conditions, so far as the construction was concerned, the same as was found when the lines were originally constructed.

Q. Do I understand you to mean that you assumed that the railroad was not in existence and that you were starting out to build it under circumstances the same as those which existed at the time when the road was built?

A. Yes, sir, so far as the Great Northern is concerned.

Q. That assumption would not apply to all of the items in your exhibit, would it, especially as to the valuation given of

right-of-way, yards and terminals?

A. No, sir; it would not apply to the value of right-of-way and terminals.

Q. As to that item there was an additional assumption, that at the time when construction commenced the present-day conditions existed; that is, that the country through which your line passed and the cities and villages through which your line passed, were the same as they are now instead of as they were at the time the road was built?

A. Yes, sir; that is, for the right-of-way and terminal grounds, for the lands.

Q. That of itself is an impossible supposition, isn't it, an impossible assumption?

A. I don't see what other assumption could be made to arrive at the cost of reproduction.

Q. Well, why did you get it into your head that the cost of reproduction was the measure of the value of your road?

A. Well, I have not said that that was the measure of value, but this statement is a statement of the cost of reproduction.

Q. This testimony of yours, Mr. Hogeland, as I understand it, is intended to bear upon the value of the railroad for the purpose of establishing the basis upon which rates should be allowed, is it not?

A. Yes, sir; I understand it that way.

Q. Well, is it your opinion that, for that purpose, the right-of-way and terminals of the company should be assumed to be acquired now, under present conditions, instead of taking the conditions in which they were actually acquired?

A. I think so.

Q. Why?

A. Because that is what it would cost to secure them at the present time.

Q. Well, would it be possible, Mr. Hogeland, to have present conditions along the line of your road, or along the line of any

other important railroad without the railroad being there? In other words, has not the existence of the railroad done a great deal toward building up the country into its present condition?

A. Without a doubt.

Q. And the development of the country, on the other hand, has done a great deal to increase the income of the railroad?

(No answer.)

Q. Now, is it possible to assume that present conditions would exist with the railroad taken out?

A. No, if the railroad made the land more valuable the taking out of the railroad, if you could assume that to be done, would destroy the thing that made the value.

Q. In other words, if you took out the railroad for the purpose of a computation of this kind, you must also take out everything which the existence of the railroad produced, and you must go back to the conditions as they were when the railroad was built, must you not?

A. That would be true so far as the one road under consideration is concerned. Of course other roads, I assume, have also contributed to the values.

Q. There isn't any doubt about that, but for the purpose of getting at the reasonableness and propriety of this basis, we can assume that there was no other road, or that there is now no other road, running into this city or into any of the other cities that are reached by this road, because the same inquiry would apply to each one; and if that were true—if your road were the only one reaching from St. Paul to the Northwest, then the conditions in St. Paul would be entirely different from what they are now, assuming that the road was not there? In other words, that the city was without railroad facilities to the Northwest?

A. Yes, undoubtedly.

Q. They would be very different; and and it is also true,

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is it not, at least supposable, that if your company had not constructed this road at or about the time its construction was commenced, some other enterprising body of men would have formed a company and would have constructed the road? In other words, the right of the people of this state to a railroad did not depend upon the volition of your Company?

A. No, I suppose that is true.

Q. And if no company built any road, the State itself could have built one, could it not?

A. I presume so.

Q. So that when you start out with the supposition that there is no railroad in a certain locality and yet that existing conditions brought about from the existence of that railroad are there, you are assuming an impossibility?

A. I think the whole scheme of reproduction is somewhat along that line, but it seems to be the best—

Q. Seems to be along the line of impossibility?

A. Yes.

Mr. HOLDEN: Finish your answer.

WITNESS: —but it seems to be the only way of arriving at a fair measure of value.

Q. That is, in other words, Mr. Hogeland, it is a method which gives a very much larger value to a railroad property than could by any process of reasoning be given to it in any other way?

Mr. HOW: Do you mean any railroad property. General, or the one under discussion?

Attorney General YOUNG: I am talking about the Great Northern.

Mr. HOW: Is it an academic question, or a practical one?

Attorney General YOUNG: We'll have you sworn, after a while, Jared.

Mr. HOW: I think you had better, if you are going to examine him on questions of law. I will do the best I can, and I have some views.

A. I think this method gives a larger value to the Great Northern than would be obtained by some other methods which might be used.

Q. And that is, in fact, Mr. Hogeland, the only justification for resorting to that method of ascertaining or pretending to ascertain its present value?

Mr. HOLDEN: If your Honor please, I object to this line of examination. That method which Mr. Young speaks about presents a question of law; it is the legal method, as we view it, the rule of law laid down by the courts. Now, counsel may differ with us as to what the rule of law may be. It seems to me this whole line of examination is a mere academic discussion, as Mr. How says, of the legal conceptions of the decisions of the court on these subjects. The point of my objection chiefly is that on this subject of land values the method and the particular method of valuing land Mr. Hogeland was not called as a witness. He has testified that his first item, item No. 1, was handed to him by the Right-of-way and Land Department. He is the Chief Engineer of the road, his testimony has to do with construction and matters of that kind, and I think it is highly improper to lead him into a field that his testimony has not covered nor purported to cover, and also to lead him into this speculative discussion which is really a question of law.

The MASTER: I am inclined to think, General, that perhaps the position taken by Mr. Holden is true. He has not testified at all in regard to the value of land. He says those values were handed to him by the Land Commissioner or someone else and he did not pretend to know anything about them.

Attorney General YOUNG: He puts them into his exhibit details.

The MASTER: He puts them in, but he does not pretend to know anything about them and they also offer to produce and expect to produce the men who made them, but he did not vouch for them, as I understand, at all, just simply says, "They

were handed over to me and I put them in in order to make up the total valuation."

Attorney General YOUNG: All of these things are affected by the same proposition, as we expect to show. I am not going to delay very long upon this question, it is simply introductory.

The MASTER: Of course it is fair for you to find the attitude of the witness as characterizing his testimony, and I don't know but some general questions of that character are proper, but at the same time it may be that the witness can or cannot answer.

Mr. HOLDEN: It becomes highly improper when we recall that the State itself called upon us and furnished us with blanks to do exactly what we have done here. Now, we may not have reached the result nor used the same factors or formula, but they called upon us to present an inventory of our property exactly on this basis, and I think that makes it highly improper for a line of examination of this kind.

The MASTER: Ordinarily, it is entirely proper to find out upon what basis this inventory is made up and what the witness had in mind in making it up.

Mr. HOLDEN: That is the reason I made no objection until the last question or two that General Young asked, which reflected upon the method adopted.

The MASTER: It is not for the Master to rule unless he is clearly satisfied that the testimony is utterly irrelevant and immaterial and I would say that much examination along this line, further than simply to get the attitude of the witness with reference to all of the testimony concerning which he has personal knowedge, might be inappropriate, but I don't like to rule the testimony out of a few questions of this kind for the purpose that I have indicated.

Attorney General YOUNG: The witness, your Honor, has come in here with a complete scheme of valuation of this railroad, and I assume that his testimony upon the ques-

tion is intended to be the most compendious, if I may use that word, of any that they will offer. They will offer other witnesses upon sections of the general question. Now we certainly have a right to know, it seems to me, the theory he had in mind in making this computation of values, why he resorted to the method that he did, and how that method differs in results from other methods that might have been employed. Now I absolutely deny, on behalf of the State, that we suggested to them how they should try this lawsuit or what evidence they should present upon this lawsuit. The State called upon the railway companies for certain information with reference to the valuation that it had in hand, several years ago. The legislature and the Railway Commission have fixed certain rates; the railway companies rush into court and say those rates are confiscatory, they commence suits to restrain the enforcement of the rates. Now, your Honor, it is for them to show by evidence that those rates are confiscatory, and one of the elements upon which that claim must necessarily rest is the element of the value of the property involved upon which an income is to be computed. We never suggested to them the commencement of the case, we never suggested to them the basis upon which they should prove it; they have made their own selection. they have come in here with this testimony; we certainly have the right to show that this testimony does not prove what they claim it proves. and in order to show that, we have a right to show that this witness proceeded upon an erroneous theory from the beginning. This witness does not know, counsel for the complainant in this case does not know, why the State called for that information from the railway companies. It had a right to that information, it had a right to a whole lot of other information which it also got—

Mr. HOLDEN: General, may I ask you a question? Will you announce, then, that the State in calling upon the railroads

to fill out the forms was not asking for information in reference to the rates?

Attorney General YOUNG: I will say this, the State was calling for information which it felt it was entitled to have.

Mr. HOLDEN: Well, it had no bearing on rates?

Attorney General YOUNG: Both for the purpose of rates and for the purpose of everything else that pertains to surveillance over railroads. The State is entitled to have all the information it can get upon this question, and the State was making a physical valuation of railroads and it was also compiling information from the reports of the railroads themselves and from other sources and trying to present ultimately to this court, or to some court having jurisdiction of the question, all of the evidence upon all of the theories, and ask the court finally to fix a legitimate theory or logical basis for income. Now we deny that any such method of valuation as this is the proper basis for the computation of income.

Mr. HOW: Do you want to withdraw Mr. Morgan's testimony?

Mr. HOLDEN: The testimony of Mr. Hogeland is that he has adopted Mr. Morgan's classification on Ex. No. 2, and I think an inspection of the two will show that that is the fact.

Mr. O'BRIEN: Do you give the market value there of your real estate?

Mr. HOLDEN: We haven't put in an "Ex. B" or "Ex. A," as Mr. Morgan did.

Mr. O'BRIEN: Doesn't Mr. Morgan's blank call for market value?

Mr. HOLDEN: Don't let's fence over small matters.

Mr. O'BRIEN: It isn't a matter of argument.

The MASTER: One at a time, gentlemen.

Mr. HOLDEN: I have made my position clear here, if your Honor please, that this witness was not produced to cover any evidence or to offer any evidence on this subject of land values,

or the basis upon which lands are valued in this exhibit, any more than he was offered or produced on the question of value of equipment or of telegraph or telephone lines and matters of that kind.

The MASTER: I think there is no evidence in this case, as yet as to the value of that first item so that it could be of any use whatever.

Attorney General YOUNG: No, nor am I asking him about the value of any property, I am only asking him about the method of getting it up. I have not asked him as to the value of any property, it only leads to the question of the method followed in their computation.

The MASTER: The only question in my mind would be as to whether he had anything to do with the method of making the valuations of that property; it does not appear that he had, at present.

Mr. HOLDEN: Obviously he had not.

The MASTER: I think, however, I will allow a few further questions in that general direction. So far as the examination applies to any of the other items concerning which he has testified, questions of that character are entirely proper; the only question is whether these really are proper cross-examination in view of the fact that as to this item he does not profess to have given any testimony.

Attorney General YOUNG: Yes, but here is the chief officer of the road, with reference to its physical situation, who is a witness and has undertaken to give the values of all of the other things that go into the valuation of the road. Now, I am asking him as to the practice employed in getting at these results. That is all there is to it. I am not going to trespass on this Court by asking this witness as to the value of any specific tracts of real estate about which he did not testify, because that would be an imposition, but I desire to say further, on that question, that we have not been following the strict rules of

evidence heretofore on either side in this case, a little latitude in the way of developing a theory has always been allowed, and I think it ought to be for the future.

Mr. How: Well, I protest, that any information sought to be elicited from this witness as to what he considers the proper foundation for a valuation for the purpose of making rates is impertinent; it will not assist the Master, and what Mr. Hogeland's views are upon the law will not embarrass counsel for the complainants if his views are against theirs, it will not encourage counsel for the defendants if his views are in accordance with theirs; it is clearly impertinent, and I protest against having to sit and listen to a sort of an examination submitting Mr. Hogeland to the embarrassment of deciding questions of law which he is not entitled to consider, has not been asked to consider; and whether his method, his evidence, is valuable in determining the basis of making rates he does not know except as he has been advised. I think the Master ought to rule it out, it is within the limits of the Master's order.

The MASTER: Well, I think it is fair to search the witness' mind and see what his attitude is, and if he has an opinion in regard to these matters it might have some bearing upon all of his testimony in the case. You may proceed, General.

The reporter then read the last question, as follows: "And that is, in fact, Mr. Hogeland, the only justification for resorting to that method of ascertaining or pretending to ascertain its present value?"

Attorney General YOUNG: That is, the present value of the land.

Mr. How: I think my objection applies to that question.

The MASTER: The witness may answer, if he can.

A. No, that was not the reason for taking that method.

Q. State what the reason was, if you know.

A. Because we were of the opinion that that was the fairest

measure of value of the lines in the state.

The MASTER: I don't think General, it is fair, perhaps, to follow up that question of real estate along these lines any further than simply to get at the attitude of the witness with reference to other testimony, for certainly his testimony does not have any bearing upon real estate values; there is nothing in this case yet to show in regard to that first item.

Attorney General YOUNG: The first item might have been omitted altogether from his exhibit.

The MASTER: It might have been and I don't know but what it would have been proper to have done so.

Attorney General YOUNG: We have not been insisting upon the strict rules or we might have asked to have it stricken out. As I say, we have been proceeding upon the theory that all testimony reasonably bearing upon the issues might be heard, and I assume that we have the same rights as the other side has in that question and that it is not going to be one rule applied to our testimony and another to that of the complainants. I know that is not true, therefore I called the attention of the Court to the fact that we have been proceeding on the plan of permitting everything that has any reasonable bearing upon the case to be heard practically without objection.

The MASTER: That is what I am permitting you to do.

Mr. O'BRIEN: I think if the Master will consider this testimony that was given day before yesterday he will see that the suggestion made is hardly proper. This witness, in the first place, has presented a complete statement of the value of the Great Northern road, which he vouches for, with the reservation that the actual values placed upon it for the real estate have been placed by subordinates, as have the telephone and telegraph values, but the method and theory and basis of those values are those, of course, as dictated by this witness, who has been in charge of this valuation, and therefore his theory upon all those matters or his reason for doing it is entirely com-

petent; and if your Honor were to rule on this as a final question, it seems to me that under the circumstances, he coming here and vouching for this, with the reservation frankly made that the particular valuation attached to the land is the judgment of another man which will be supported, does not change at all the question of the theory. In addition to that, he presents Ex. 1, the map or plan upon which the entire property was reproduced, and several of the items going to make up Ex. 2 are items based upon the values contained in the grading and in other matters—for instance, the interest of $27,000,000 during the time this work was being conducted. Now, it would be Hamlet with Hamlet left out if the responsible head of the department, preparing a valuation and adopting a theory, could refuse to divulge why he adopted that theory because some of the items were made up from details furnished by subordinates. But, as I say, if it were a matter of final ruling your Honor would, I think, upon reflection, permit that evidence.

Mr. How: I don't think the statement ought to go unchallenged that Mr. Hogeland has offered testimony showing the value of the Great Northern System. He has not. He has offered testimony showing the present cost of construction. The ultimate fact to be found by the Master is the value from these various things that will be offered. Now, this property may be much more valuable—and is, we believe—than the present cost of construction of the physical property, including its equipment, and that is by no means the ultimate and only test, probably, of the value of the System. The Master knows that, from the views of complainant's counsel in the Northern Pacific case. Now, I protest again, that Mr Hogeland in being asked whether or not this system was adopted because it was a better system, in his view, for the basis of rates, is wholly impertinent and any question seeking to elicit Mr. Hogeland's views upon that subject are impertinent. It is manifest to everybody that the reason why Mr. Hogeland prepared that statement in that

was because he was requested by counsel to do so. It is not a statement of the value of this system, it does not purport to be, and Mr. Hogeland does not want to stand here, and we certainly don't want him to stand here, as testifying that in his opinion the Great Northern System is worth the amount of his statement and no more. That is not going to be the condition the record will be left in, either—I will say that.

The MASTER: Well, I don't think it would be proper to examine him with reference to the value of the real estate, and perhaps not proper, generally, to examine him with reference to how those values were obtained, for I think that in this case all through up till now that has been simply an assumption on his part—that those figures were not made under his direction but were given him by the head of another department, and he just simply inserted them for the purpose of representing in one sheet the valuation as a whole claimed by the complainants, but as to that valuation he has not offered any testimony whatever, and if the case were rested now on the question of valuations, that item would all have to be stricken out, deducted from the total result; but I want to give you all the latitude that is proper and that you ought to have; I don't think this line of testimony ought to be followed up further than to find the attitude of the witness—and perhaps you have gone as far in that direction now as you care to go.

Attorney General YOUNG: The chances are that when the subordinate comes in here and we ask him these questions, he will say that Mr. Hogeland told him to do it that way.

The MASTER: Then there is no testimony in the case. Whoever makes those valuations, on whatever basis they are made, will have to testify fully in regard to that matter.

Attorney General YOUNG: The way we understand this exhibit, your Honor, reduced to its last analysis, is that it embodies the estimate of the cost of reproduction by the Chief Engineer of the Great Northern road.

Mr. HOLDEN: No, he expressly disclaimed—

Attorney General YOUNG: It was so placed on file and it is his child; if he wants to deny the paternity of it, all right.

The MASTER: Well, if he claims or has claimed, or it is claimed in his behalf, that he has testified as to the value of the real estate in this case, your questions would be undoubtedly proper.

Q. By whom was this valuation of land for right-of-way, yards and terminals prepared?

A. By Mr. Hayden, the Assistant Right-of-way and Tax Commissioner.

Q. And by whose direction did he prepare it?

A. I can't tell you. Certainly not by my direction.

Q. You did not direct him to prepare it, nor direct the basis upon which it should be prepared?

A. No, sir; I did not.

Q. And had nothing to do with that item 1 as appearing upon your Ex. 2?

A. No, sir.

Q. It is on the first page of your Ex. 2. As to all of the other items appearing and enumerated on page 1 of your Ex. 2, except perhaps items 27 and 28, if I remember rightly you did give your opinion as to the values?

A. No, sir; I stated that they were prepared by the heads of other departments.

Q. Well, you stated that as to 27 and 28.

A. Yes, sir; and also as to the equipment.

Q. Also as to the equipment, consisting of items—

A. Items 31, 32, 33, 34 and 35.

Q. In a general way, the other items enumerated on page 1 of your Ex. 2 consist largely of an inventory of the physical property belonging to the Great Northern System as you claim it now exists with the values of last year?

A. Yes, sir.

Q. Used to compute its value. You have not assumed, in any one of these cases or in any one of these items, to give the cost of what goes to make up the item to the Company of the original cost?

A. I don't quite understand that question.

Q. In giving these various values of the items appearing on page 1 of your Ex. 2, you have not undertaken to give the original cost to the Company, but you have given what they in your opinion, theoretically, would cost had the work been done and the structures been erected last year?

A. That is true.

Q. You spoke in your testimony yesterday about the State calling upon you for certain information with relation to your road. That request was made in 1905 or 1906, was it not?

A. In 1906.

Q. Did you respond to that demand made by the engineer of the railroad and warehouse commission of the state?

A. Yes, sir.

Q. And in enumerating the things that went to make up the physical property of the road did you give values?

A. Generally I think we did.

Q. Are those the values that appear in this exhibit?

A. Not necessarily so.

Q. "Not necessarily so," what do you mean by that?

A. In some instances I think they are and in others they are not.

Q. Well, is there any instance among any of the items appearing upon this page where the prices applied to the computation of its value was not the prices of last year, that is, 1908?

A. No, my understanding is that we have applied last year's prices to all of the items.

Q. Well, then, the value could not have been the same in any information furnished by you to the railway commission in 1906, could it?

A. Yes, if there had been no changes in the values as of the two dates there should be a substantial agreement.

Q. The values in most cases had advanced, had they not, from 1906 to 1908?

A. No, I don't think that is true in most instances. In some they had.

Q. Had they gone down any?

A. I think not.

Q. The valuation given here, then, is higher than the valuation which you gave or claimed for the property in the report made to the state?

A. Yes, sir; and that is partly brought about by the increased mileage or increased number of items.

Q. But you have adopted an entirely different valuation for individual items where the price of that particular item had advanced between 1906 and 1908?

A. Yes, where we felt it was fair to make a change in the unit price we have done so.

Q. Never mind the explanation of whether you thought it fair or not, did you in fact increase the price?

Mr. HOLDEN: I submit that the witness may state the basis on which he acted.

The MASTER: It is proper for him to answer the question directly as asked, and then if he wants to make an explanation he may do so.

The last question was then read to the witness and added to as follows: "wherever the market price had advanced."

A. Yes.

Q. These suits, Mr. Hogeland, were commenced in the early part of 1907, were they not? Do you know?

A. I do not, but that is my recollection.

Q. Did you undertake to get up a valuation of the property as of the date of the commencement of the suits?

A. No, sir.

Q. You were not asked to do so. Was this valuation prepared for the purpose of being used in these suits?

A. Yes, sir.

Q. And by whose request was the valuation made?

A. By the request of our legal department.

Q. Was there any date mentioned to you as the date of the valuation desired?

A. No, sir; not that I recollect.

Q. I think you testified yesterday that you had been engaged more or less in making this estimate or valuation for the last three years?

A. Yes, sir.

Q. What unit prices did you use upon that part of the work that was finished by you during the first year?

A. The entire estimate has been changed where necessary to make it according to 1908 prices.

Q. It is an estimate, then, of 1908, and not an estimate of three years ago?

A. Yes, sir; it is an estimate, as stated, as of June 30, 1908, of the cost of reproduction at that time.

Q. Item No. 2 of your Ex. 2 refers to the matter of grading, clearing and grubbing. When you started to compile that sheet constituting item 2, what did you have in mind as constituting the grading, clearing and grubbing?

A. We had in mind to obtain, as nearly accurate as possible, all of the amounts of those items that existed in the railroad at the time we were doing it. It was made up, primarily to complete the blanks as furnished by Mr. Morgan, and has been added to or changed wherever necessary in our opinion to make it show correctly the different quantities as of June 30, 1908.

Q. Well, you didn't understand that Mr. Morgan was giving you information as to how you should try this lawsuit?

A. No, but we were able to use the same information that we were getting together for Mr. Morgan, and we made use of that information.

Q. How did you ascertain the number of acres of clearing?

A. Where we could secure that from original estimates paid contractors we endeavored to get it that way; wherever it was necessary to take it from our maps or profiles we computed it in that way.

Q. Now then, in making up this page constituting item No. 2, you went back to the conditions as they existed at the time the road was actually built, did you?

A. We tried to; yes, sir.

Q. But you are aware that the item of valuation did not so go back?

A. Do you mean of right-of-way?

Q. Yes.

A. As I have explained to you, my understanding is that the right-of-way values are based on present-day prices.

Q. And present-day conditions?

A. Yes, sir.

Q. Well, now, present-day conditions are entirely different from the conditions that existed when the road was built; shouldn't you adhere to the same theory upon all your estimates? Why, in computing the page in item No. 2 do you go back to the conditions as they existed—

A. I didn't think it was right to assume, because clearing had been done by the Railway Company, that it wasn't right to consider that that grading would have to be done again, that clearing would have to be done again if the road was to be reproduced. That is, it was something which had been done by the railroad and would be fair to consider that we would have to do it again.

Q. But if you were proceeding under present-day conditions it would not be necessary?

A. No, the Railroad Company having done it it would not be necessary to do it again.

Q. And all of the surrounding country having been cleared

and settled and cultivated, you couldn't find any land upon which that item would be required at all, could you, along that line?

A. That is not true; we could find a great deal. We couldn't find as much.

Q. You couldn't find as much. Well, wherever you found that it would be to your advantage to go back, then, you went back to the conditions that existed when the road was built, and applied present-day conditions when that would be to your advantage?

Mr. HOLDEN: I object to that question, and take the liberty of instructing the witness not to answer it, because it is palpably an insult.

Attorney General YOUNG: Maybe we could assume this whole suit is an insult.

Mr. HOLDEN: Well, then, we will discuss it on that basis, if you like.

Attorney General YOUNG: You have challenged our right to make these rates and we challenge your right to make this valuation.

Q. You applied to all these things the cost of doing that kind of work at the present time, you did not apply in your computations what it cost the Company to have it done at the time the road was built?

A. No, sir; I applied the prices prevailing in 1908.

Q. Do you think that it is a logical proposition to apply the prices that prevailed in 1908 to the conditions that existed thirty years before? If you are going back to the conditions that existed at the time the railroad was built, why don't you give us what it cost at that time to do this work?

A. Because, as I have explained to you, my opinion is that the cost of reproduction is the fairest measure of arriving at the value.

Q. Well, your counsel state that the cost of reproduction is a question of law.

A. Well, you are asking me the question—

Q. I am asking you why—

A. I think it should be left to the Court, but you are asking me and I am trying to answer.

Q. I am asking you why didn't you give us what this work cost the Company at the time the road was built.

A. It isn't possible to do that.

Q. Can you furnish that information?

A. I don't think it can be furnished.

Q. How did you get at the information upon these various subjects that you give us here upon the sheet marked item No. 2?

A. Only a part of it, as shown, as I have explained, is taken from original records. It would not be possible from our records to get what everything has actually cost.

Q. I think you stated yesterday, Mr. Hogeland, that 43 per cent of the information contained on this sheet with reference to quantities was obtained from the records; is that true?

A. Yes, I testified that 43 per cent was obtained from quantities for which contractors were paid on original construction; and, in addition to that, 30 per cent more was extra work, on record.

Q. And that there were some of the items for extra work that were not of record?

A. Yes, sir; as well as what estimates we made from profiles.

Q. Now, I want to ask you whether in reference to that portion of the information which purports to be compiled on page marked item No. 2 which was taken from the records you cannot give us the original cost of the work.

A. I think we could give the original cost of the grading, but that would only be a part of the railroad.

Q. You couldn't tell what the cost of clearing was?

A. Yes, I think on that part we could give the cost of clearing.

Q. And of grubbing?

A. I think so.

Q. What other items can you give us the cost of on that sheet?

A. Those are the only items on which the cost could be obtained on this sheet.

Q. You can give us the contract prices on the grading, can't you, so far as the information with reference to grading is concerned?

A. I think the grading was included first in the first statement.

Q. I just take the columns clearing and grubbing—

A. I think the original cost of clearing, grading and grubbing could be given, that is, that would apply to the lines where we have the original prices for original quantities paid contractors.

Q. Will you kindly furnish that information?

A. It could not be done very quickly, but I say I think it could be furnished. We can do the best we can; I think it would probably take two or three weeks' time to get it out.

Q. Well, we would like to have you furnish it to us as soon as you can.

Mr. HOLDEN: If your Honor please, I want to make a statement in that regard, and I want to make it perfectly clear what my position is. There is no paper, and no record, no book, nor anything of that kind on paper or in writing in the Great Northern offices or under its control relating to any issue in this case that is a legal or proper issue that we will not cheerfully and voluntarily furnish; a statement of this character, even though it may involve a large amount of work, we will take pleasure in furnishing or permitting the officials or force of the state to make from our records, if they prefer to make them up instead of our furnishing them; I want that to be perfectly clear so that there will be no question about it.

We do make the point, however, and it seems proper to make it now, because the question may arise in the same form at other times, that the original-cost figures are totally immaterial and incompetent to any issue in this case. We are not claiming any return, we are not claiming that these rates shall be measured upon any basis of what this road cost; it may have been far more expensively built than there was any justice or ground for; it may have been built under conditions when the cost result was far less than any other set of men could have produced a road for. So the same question arises in the matter of the obligations of the Company, the stock and the bonds; we do not claim that we are entitled to a return because we have issued this, that or the other amount of capital obligations; we may have issued too much, whereby a return would be a hardship on the public if we would demand and were entitled to receive a reasonable dividend upon any such excessive capital. On the other hand, we may have issued far less than we might lawfully issue, whereby if rates were made only to return a reasonable amount upon an undercapitalization, the owners of the property would not be receiving what the law would entitle them to receive. Now, since the last decisions of the supreme court—and by that I refer to those within the last three or four months, and counsel and the Master are familiar with what I have in mind—it must have been made perfectly clear, beyond cavil, that the point made by the objection must be and is well taken that the original cost of an article, twenty or thirty years ago, the cost of clearing thirty-five acres of ground in 1875 and all similar figures can have no bearing and can give this Court no help in determining the fair value of the property today—the cost of reproduction, or phrase it in any other way you please; the supreme court of the United States seems to have laid the rule down. Now, I assume that counsel may differ—lawyers always do—but we make the point and announce our position; not that there is anything we have

got that we won't show cheerfully and voluntarily and promptly, (I want no misunderstanding on that subject) but we raise the legal question whether any such amount of work, any such amount of time that will be taken to investigate lines of that kind which in our judgment will ultimately, whenever passed upon by the Master or by the Court be held to have no bearing, legal or otherwise, on this problem, whether it is a proper thing to take that time, and we raise the point in order, chiefly and mainly, to save time and expedite these cases. And with that understanding, that if it is a proper field of investigation for the purpose of finding the issues in this case, according to the practice laid down by the court, we will produce anything we have; if it is not, we see no reason, and on the contrary, there is every reason why it should not be produced, simply because it takes unnecessary time and unnecessary labor; and, therefore, notwithstanding General Young's request, and in the spirit in which I make this statement, that we are not seeking to conceal or hide anything, anything we have got we will produce, when it is legally made clear that we should produce it; with that understanding we make that objection.

Mr. O'BRIEN: Well, do you refuse to produce it?

The MASTER: I don't think it necessarily follows that counsel is asking this question for the purpose you suggest—

Mr. O'BRIEN: No.

The MASTER: —but this witness is under cross-examination. He is stating what it will cost to do thus and so and in determining what is to be done he goes back to the time when the work was originally done, as I understand it, in his testimony. Now, I am inclined to think that even the quantities and the character of the work might be in a measure determined and his testimony given effect, with reference to the cost of doing the work at that time. If it was a large consideration, we might assume that it was very considerable work, but if it was a nominal consideration the result might be otherwise.

It seems to me it is proper cross-examination.

Mr. HOLDEN: Unquestionably as to quantities, or anything of that kind; and the cross-examination of the witness is certainly proper except in connection with the request made upon him; that is the reason I make it. He makes a request upon us which involves two or three weeks' work of a good many clerks; and we will announce our position further on that subject, but I make the point now so as to be perfectly clear what our position is.

The MASTER: I understand your position, and I think the testimony is proper cross-examination.

Mr. HOLDEN: I don't raise the point as to the testimony; it is to the request made by counsel.

Mr. O'BRIEN: I confess I don't understand your position.

Attorney General YOUNG: I understand his position to be that the original cost cuts no figure, and that any evidence bearing upon that ought not to be introduced. Well, now, if we have reached the point, that we know what the law is on that question it will help the trial of the case. We confess we haven't been able to dig out of any recent decision any rule upon that question.

The MASTER: I think this may have some bearing upon the character of the work.

Mr. O'BRIEN: Does the counsel refuse to produce it, or is that a matter for future consideration?

Mr. HOLDEN: Well, I understand you make a specific request, General, for—

Attorney General YOUNG: Yes, for the items—

The MASTER: The original cost of this work, including quantities.

Attorney General YOUNG: —to which he has applied a computation of the cost of the work at last year's prices.

Mr. HOLDEN: You are clearly entitled to the papers showing quantities, and the fact is now as it was when Mr.

Hogeland was on in direct that any record which has been used in making up these statements is open to your inspection; and I take it that whatever we have got on the question of quantities will also show on the question of cost, so there will be no question on that subject. We will make an examination to see what we have got and see how much time will be involved, and make a final statement on the matter before you finish your examination, because we want you to have every record that has been utilized in making up this statement, but cost items have not been used in making up this statement.

Attorney General YOUNG: Well, if they had been used they would be here and we wouldn't need to be calling for them; it is because they have not been used that we want them produced.

Mr. HOW: You don't want them for any purpose of cross-examination, as I understand it; you only want them as matters of proof upon the original cost of the property?

Attorney General YOUNG: We are trying to get at the facts, Mr. How, working as hard as we can to find out what the facts were with reference to the construction of this road, what it cost, and upon what basis it ought to have a return.

Mr. HOW: Now, it has appeared to me you have been trying to find out what the law is.

Attorney General YOUNG: Well, we would like to find out the law, too, if you will tell us what it is.

The MASTER: Proceed, gentlemen.

Q. Are the quantities appearing on this sheet with reference to the matter of grading the same as the quantities stated in your report made to the state, except in cases where new work has been done since; or have you increased the quantities?

A. I think there have been some changes made, both increases and decreases.

Q. What could you say as to the general result, as to whether the quantities of the grading are very substantially increased in the estimate appearing on sheet marked Item No. 2, over the

quantities given in your report to the state?

A. I think they are substantially the same.

Q. Well, how does the quantity of grading or the amount of the grading as given in this sheet Item No. 2, compare with your records on the subject; that is compared to what your books show?

A. That is all explained in Ex. No. 3, in which the sources from which the grading was obtained are all detailed.

Q. The quantities as shown in the first column on Ex. 4, headed "Quantities for which contractors were paid on original construction" are the quantities that appear from your books, are they?

A. Yes, sir; as originally paid to contractors.

Q. And are those the only quantities that appear from your books?

A. As paid to contractors; yes, sir.

Q. Well, now, what I want to get at is, is your report as to those particular items, as to which you have a book account, the same as the quantities that appear from the books, with reference to these particular items?

A. That is, are they correct, do you mean?

Q. Yes, does this return correspond with the record, or has it been enlarged?

A. No, sir; that is as it appears on our records as the quantities paid to contractors.

Q. Now, will you kindly state again what you mean by the figures appearing in the second column marked "Profile Estimates"?

A. That represents estimates of quantities made from profile for certain lines or parts of lines where we did not have the quantities originally paid contractors.

Q. That is where you had no book record of it?

A. Yes, sir; where we could not secure the record as to what was originally paid contractors we made a profile estimate.

Q. From original profiles, or did you prepare the profiles also from measurements?

A. From the original profiles.

Q. And these are the correct quantities as appearing from those profiles, are they?

A. Yes, sir; those are the quantities which we have estimated from those profiles in that way.

Q. And are these the same as the return made in response to the inquiry of the state?

A. No, sir; my recollection is in returning our statements to Mr Morgan we simply showed the lump amount for each section; but we didn't separate it into the different sources from which we obtained it.

Q. And as a result of that course, what is the difference between this exhibit and your return to Mr. Morgan?

A. I can't state the number of yards, but it doesn't differ very much. It is right to state that our return to Mr. Morgan was made as of June 30, 1906, and this is brought up to June 30, 1908, which would necessarily include some additional work.

Q. I presume on any work done since 1906 you have the contract prices?

A. Yes, sir; and I have shown them in one of my exhibits.

Q. But is there in this profile any estimate that applies to recent work done by the Company?

A. No, sir.

Q. Your records are perfect as to recent work, aren't they?

A. Yes, sir.

Q. You have all of the data?

A. Yes, sir.

Q. The extra work of record, and the extra work not of record, constitutes a considerable portion of the gross quantity shown on this exhibit; will you kindly state just how you got at that?

A. The extra work of record is obtained from steam-shovel reports, from either the superintendents or our engineers, that appear as a matter of record in either our department or the accounting department at the general office, and covers grading done since construction, of side-tracks, bank-widening, bridge filling, grade changes line changes, etc.

Q. That was not additional work done at the time of the original construction, then?

A. It has all been done since original construction.

Q. And how has it been paid for, out of operating expenses or out of captital account?

A. That I could not tell you.

Q. That class of work is generally paid for out of operating expenses, is it not, or are you familiar with the accounting department?

A. No, I don't think that class of work is ordinarily paid for that way. It would depend on just what the specific work was; take bridge filling, for instance, an estimate would be made of the part of that filling which would be necessary to charge to operating expense, and the part necessary to charge to improvement, depending on what it would cost to replace the bridge itself; that is, increased cost of the work would be charged as an improvement, or an addition. Of course, that is accounting department work, and I am simply giving you my—

Q. You are not familiar with it?

A. —my idea. No, sir; I wouldn't say that I am sufficiently familiar to answer that question.

Q. I don't want to trouble you with it unless you are. The explanation you have just made covers those two columns "Extra work not of record," and "Extra work of record."

A. Yes, sir; the same explanation would cover, one being a matter of record and the other a matter not of record.

Q. At the foot of the sheet marked Item No. 2 you have a

computation of the cost of moving this earth; are the contract prices given for doing that work?

A. No, sir.

Q. They are higher than the contract prices, are they not?

A. Yes, sir.

Q. In all cases?

A. Yes, sir.

Q. Can you furnish us with information as to the contract prices?

A. Exhibit No. 4 shows average contract prices since 1898; and, as I explained to you before, I think the contract prices could be furnished for the balance of the lines, of which we have the original quantities and prices paid contractors, which would include a portion of the lines only.

Q. Well, you say forty-three per cent; you have that information as to forty-three per cent of the work, and for thirty per cent of the extra work, and with that information I think we could reasonably get at what the cost was of the other per cent of the work.

A. Let me explain, that practically all of the thirty per cent was done by the Railway Company with steam-shovels and work-trains; therefore we would have no contract prices for that.

Q. What was done by the Railroad Company—

A. By steam-shovel and work-trains, not by contract.

Q. You have the superintendent's reports of the cost of the work, haven't you?

A. In some instances.

Q. Haven't you got it in all of the instances?

A. No, sir; we haven't.

Q. What has become of it? The superintendent is required to make a report of that kind, isn't he?

A. I think he makes such a report to the accounting department, but he doesn't make them to us.

Q. He doesn't make them to your department?

A, As I explained, part of these returns of the extra work on record would be from our engineers and part from the superintendent's steam-shovel reports; and there would be a return of yardage, but not necessarily a return of cost.

Q. Exhibit 4 purports to give the contract grading, quantities and prices; now, I want to get at how you made these computations, and get the detail of one or more of these items so we can understand it. Take the item Kelly Lake to Fermoy, started in 1907, will you please tell us just what enters into your computations of the cost on that portion of the road? It is in St. Louis county.

A. Do you desire me to read off the quantities?

Q. Well, I can see the quantities; I want to know how you get at it. That road is 23.4 miles in length.

A. 23.4 miles in length, and the total amount of earth was 656,642 yards, at an average contract price of 36 cents.

Q. How did you get at that average contract price of 36 cents?

A. That was the average price paid the contractors for the work, for which they were paid.

Q. What do you mean by the average?

A. Why, if there was more than one contractor on the line and the price varied, it would be an average price, an average contract price. In this instance there was only one contractor, and that was the one price paid for earth. There was 62,083 yards of hard-pan at 42 cents. That was the price paid the contractors for that hard-pan.

Q. The loose rock 11,277, for which the price is given as 47 cents?

A. Yes, sir.

Q. And the solid rock 2,653, the price $1.15 per yard?

A. Yes, sir.

Q. Making a total yardage of 732,655, and the average con-

tract price of 36.7 cents?

A. Yes, sir.

Q. Can you give us the amount paid the contractor on that work?

A. In dollars and cents?

Q. Yes.

A. It would be obtained by multiplying that. I didn't enter those total charges up.

Q. What I want to get at is what constitutes the other items that went into the gross sum which you give here.

A. It is made up of the overhaul—

Q. Will you kindly make that computation there?

A. I make it $268,884.39.

Q. That is the total amount paid the contractors for all of the work done on that line?

A. No, sir; that is the total amount paid contractors for the earth work, hard-pan, loose rock and solid rock, not including the overhaul.

Q. How much was the gross there?

A. $268,884.39.

Q. The total amount given on your exhibit for the items that you have mentioned, that is, the total amount of your computation for the items you have mentioned, is $268,884?

A. Yes, sir.

Q. Under the head of total charges on Exhibit 4 there appears opposite the items that I have referred to the amount $402,648?

A. Yes, sir.

Q. Which is $133,764, in excess of the amount paid the contractors for earth, hard-pan, loose and solid rock. Of what is the $133,764 made up?

A. That is made up of the overhaul—

Q. How much is that?

A. I can't tell you from these papers. I have that informa-

tion somewhere at the office; I haven't it here. And any extra bills that are properly chargeable to the grading, transportation charges, and any items properly chargeable to grading that were not paid for in paying for earth, hard-pan, loose rock and solid rock.

Q. Well, could you tell us what those items are that you mention, all the items properly chargeable to the cost of the grading?

A. Well, of the ones I have mentioned overhaul is one; and any transportation of men and outfits would be another; the opening up of ditches, changing of roads, any items of that kind that are properly chargeable against grading and not paid for by contract price.

Q. But you can't give us the items which went to make up the excess charge in this case?

A. Not from the information I have here. I can obtain that for you.

Q. Can you bring us the details of that extra charge on this particular piece of road tomorrow, Mr. Hogeland?

A. I think I can; yes, sir.

Q. It will serve to illustrate the other items; I think that we want but one.

A. It will show how they are all made up.

Q. Now, on item No. 3 of your Ex. 2, the subject of protection work, riprap and retaining walls is covered. Do I understand that to be a matter taken from the records?

A. Partly from records and partly from measurements and estimates sent in by our division engineers.

Q. And it covers the entire system within the state?

A. Yes, sir.

Q. Much of this work was done a great many years ago?

A. Yes, sir; some of it done a considerable time ago.

Q. You haven't assumed to give us what the company paid for that work at the time it was done?

A. No, sir; I have placed it as the cost of reproduction.

Q. You have applied to the quantities of work in that line which your books showed to have been done the prices which prevailed for that amount of work last year?

A. Yes, sir.

Q. Those prices were considerably higher than the prices that the Company actually paid, were they not?

A. No, I don't think that is true. The prices for that class of work have varied a great deal; sometimes higher and sometimes lower than the figure which I have given.

Q. Which way have they varied, up or down?

A. I think they have fluctuated both ways.

Q. Doesn't that item No. 3 in Exhibit No. 2 show a greater sum as the estimated cost of the work than was actually paid out for the work?

A. I don't think so, when all of the charges are taken into account.

Q. Do you know whether that is true or not?

A. No, I can't tell you whether that is true or not, but that would be my judgment.

Q. If your records showed that more had been paid than the work could have been done for last year, you would have returned it, would you not?

A. No, sir; I haven't made my estimate that way.

Q. Do you want to tell us that there is any case where you have returned a less sum than you actually paid out?

A. Yes, sir; I am quite sure that for some of the work it has cost us more than this; but I have endeavored, as I explained before, to make this up on the basis of what it would cost us to do it last year.

Q. Well, can you tell us the work that actually cost you more than the prices last year? not necessarily on this item, but anywhere in the exhibit.

A. This class of work you have reference to?

Q. I mean any of the work shown in Exhibit 2.

Mr. HOLDEN: I see Mr. Hogeland is still looking at Item No. 3, protection work; do you mean to limit him to that?

Attorney General YOUNG: No, I intend that as a general question.

A. For Item No. 3?

Q. No, for anything in that exhibit. Can you tell us in a general way, where there is anything returned in this exhibit as a part of your estimate where the return is less than the money paid out?

A. Oh, I think rail would, by all means, be money paid out more than we have returned.

Q. More per ton?

A. Yes, sir.

Q. But a ton of rails at the time that the prices were high would go a good deal further than now?

A. Not the same weight of rail; no, sir.

Q. But you were not using that weight of rail?

A. We are not making our estimate that way; we are making out estimate on the basis of what we have in the railroad now.

Q. You are talking about rail costing more per ton some years ago?

A. Yes, sir.

Q. For a smaller rail?

A. You are talking about estimating the cost of a mile of railroad. I am talking about the tons of rail.

Q. It would have taken fewer tons of the smaller rail to have built—

A. That is self-evident, but that is not the kind of railroad we have.

Q. I don't think you understand me. It is true, is it not, that a ton of rail of the weight that you were using at the time this road was built would go much farther lineally than a ton of rail now?

A. You mean that 60-pound rail would go farther than a 75-pound rail?

Q. The rail you were using at that time.

A. Is that an illustration of what you mean?

Q. I presume that is; you might use that.

A. If you mean that, that is true, but we haven't that kind of rail. That is not what we are figuring on. We are figuring on what we have in the railroad.

Q. But you told me that your rail years ago cost more than it does now.

A. Per ton.

Q. Per ton?

A. Yes, sir.

Q. Now, is that true when you take into account the greater lineal extent?

A. Why, yes, per ton it is; bound to be true per ton.

Q. It costs more per ton, but I am talking about per mile.

A. Well, I am talking about per ton.

Mr. HOLDEN: What you mean is that a given weight per ton at the price you have put the rail in as of June 30, 1908, is less than that rail would have cost in years preceding?

WITNESS: Yes, sir; that is the idea. Our rail has been put in by tons and the price per ton is less than it has been in former years.

Mr. HOLDEN: Less than you actually did pay in previous years for the same rail?

WITNESS: Yes, sir.

Q. What do you mean by previous years?

A. From the time the road was first started.

Q. Ten years ago rail was a good deal cheaper than it is now, wasn't it?

A. For one or two years it was cheaper than it is now.

Q. In 1897 rail could have been bought for $16 a ton?

A. There were two or three years when rail was purchased

at a considerably lower price than—

Q. Then what do you put it in at now?

A. I put it in at $30.75 per ton.

Q. So it is not true, as an actual fact, that at all periods heretofore what you paid for rail was higher than the price you have put it in at now?

A. No, I didn't say so.

Q. Well, we will proceed along in the order in which you gave your testimony. On page marked Item No. 5, which relates to cross-ties and switch-ties, you have given the number of ties, as I understand it, in your system within the state, at the time this estimate was made, as of June 30, 1908, giving the different kinds of ties that were actually in the road at that time?

A. Yes, sir, as nearly as we could get at it.

Q. And at the bottom of the exhibit you have undertaken to give the valuation of those ties. You put in oak cross-ties 1,084,470 at 85 cents; did you pay 85 cents for oak ties on your road?

A. No, sir.

Q. Where did you get those ties? Where did they come from?

A. Practically all from points in Minnesota.

Q. Northern Minnesota?

A. Central and Northern Minnesota; yes, sir.

Q. And this price does not purport to be what you were paying for ties, during the time of the estimate, does it?

A. No, we have obtained very few oak ties, for the past few years.

Q. And where have you obtained your cedar ties?

A. Partly from Wisconsin, partly from northeastern Minnesota.

Q. And that is true not only of the ties, but of other materials in your road, they are practically all from this state, are they not?

A. Yes, sir; practically all.

Q. How did you come to return the oak ties at this price, 85 cents?

A. I put them in at that price because I figured that if we could obtain that number of oak ties, they would cost us that much.

Q. Well, is that the price you were offering for oak ties at the time you made the estimate?

A. No, sir.

Q. It is considerably in advance of what you were offering, is it not?

A. Yes, it is considerably higher than what we were offering.

Q. And considerably higher than you ever paid for oak ties?

A. Yes, sir.

Q. What were you paying for oak ties at the time you made this estimate?

A. I think about 65 cents. But it is fair to say that we were not getting any to speak of. In fact, the oak tie timber in Minnesota is practically exhausted.

Q. If you had offered 85 cents for oak ties, it might have brought some out, mightn't it?

A. If there was any timber left to make them from, but there is, as I say, very little.

Q. Were you paying 75 cents for cedar ties at that time?

A. No, sir; we were paying about 66 cents.

Q. Cedar ties were not worth in the market the price you have given here, at that time, were they?

A. We were getting what few cedar ties we did get at 66 cents, but we were not getting any such quantity as would be necessary to secure to reproduce one-eighth of the system each year.

Q. But there is quite an abundance of cedar-tie timber in the state, isn't there?

A. No, I think you would call it rather limited.

Q. Wasn't there a complaint, last year, on behalf of cedar owners that there was no market for the timber?

A. Not that I was aware of.

Q. The testimony before the Board of Equalization isn't the same as comes to your office. How about the fir, were you paying that price for fir ties, last year?

A. Yes, because they came from the west, and that price is put in at about what they cost us laid down; there is a very small quantity.

Q. You never paid as high as 75 cents for cedar ties?

A. Not that I recollect of, no sir.

Q. How about the tamarack, were you paying 65 cents for tamarack at the time this estimate was made?

A. No, we were paying about 60 cents for tamarack.

Q. And that is the highest that ever was paid for tamarack ties, isn't it?

A. I think it is as much as we have paid, yes, sir.

Q. The same is true of pine ties, of which there are 97,725 in your estimate?

A. Yes, sir.

Q. The price that you have returned is higher than the price you were paying or ever did pay?

A. I think we paid that much for pine ties, and that is somewhere near what we paid last year.

Q. The very small number of pine ties makes that item inconsiderable?

A. Yes, sir.

Q. There are a few elm ties at 45 cents, less than 4,500 all together, so we won't mention that. I have here a notice of your company of the prices it would pay for ties which I will ask you to look at and state whether it is correct, during 1907 and 1908.

A. Yes, sir, that seems to be a copy of the notice issued by

the purchasing agent.

Q. And that contains a correct statement of the prices that you were paying for ties of the character therein enumerated at that time?

A. Yes, sir, I suppose it does.

Q. According to that statement what was the price of oak ties?

Mr. HOLDEN: Do you offer this as proof that we paid that, or that we put up this notice and offered it? and where, at what location?

Attorney General YOUNG: I think you have fixed the prices of the ties you bought. I want to show what you were paying for ties at that time, so that the Master may have it before him.

Mr. HOLDEN: You offer this notice, then, as evidence of what we were paying or what we were offering?

Attorney General YOUNG: I offer that notice for what it states, that that is the price of ties purchased by the Great Northern Railway.

Mr. HOLDEN: It doesn't state that that is the price for which they were purchased.

Q. Will you state what the price given for oak ties is according to that notice?

A. No. 1, hewed or slabbed, 7-inch face and over, 7 inches thick, 57 cents per tie.

Q. Just read the prices into the record.

A. No. 2, hewed or slabbed, 7-inch face and over, 6 inches thick, 47 cents; No. 3, hewed or slabbed, 6-inch face and over, 6 inches thick, 42 cents; No. 4, sawed, 8-inch face and over, 7 inches thick, 57 cents; No. 5, sawed, 8-inch face, 6 inches thick, 42 cents; No. 6, split, 8-inch face and over, 7 inches thick, 57 cents; No. 7, serviceable oak, culls, 15 cents; cedar, No. 10, hewed or slabbed, 7-inch face and over, 7 inches thick, 40 cents; No. 11, hewed or slabbed, 6-inch face and over, 6 or 7 inches thick, 32 cents. Tamarack: No. 15, hewed or slabbed, 7-inch

face and over, 7 inches thick, 35 cents; No. 16, hewed or slabbed, 6-inch face and over, 6 or 7 inches thick, 30 cents. White pine: No. 20, hewed, slabbed or sawed, 7-inch face and over, 7 inches thick, 34 cents; No. 21, hewed, slabbed or sawed, 6-inch face and over, 6 or 7 inches thick, 26 cents; No. 22, serviceable cedar, tamarack and white pine culls, 10 cents.

Q. Do you know what the prices of ties were in 1906?

A. The average price for cedar on cars was 49½ cents. The average price of tamarack, 44 cents. That refers to the ties purchased by our company in Minnesota.

Q. And on oak?

A. I haven't the price on oak ties.

Q. Mr. Farrington, testifying before the Railroad and Warehouse Commission, at the time these rates were being investigated, testified that oak ties were worth 30 to 35 cents in 1896, and 35 to 50 cents in 1906, is that substantially correct?

A. Did you ask me 1906?

Q. Yes, I asked you about the 1906 price. This testimony covers both periods, 1896 and 1906. The oak ties according to Mr. Farrington 35 to 50 cents in 1906; that is substantially correct, is it not?

A. It might cover a few; I don't think it would cover any great quantity of the ties.

Q. Now, then, as a matter of fact, Mr. Hogeland, the ties of the various materials in your road at the time this estimate was made cost the company a great deal less than the figures that appear either from this circular or from Mr. Farrington's testimony; in other words, ties have rapidly advanced in value of recent years, have they not?

A. Yes sir, they have increased in price.

Q. How do you justify putting into your estimate of value a price so much higher than you actually paid for ties at the time?

A. Because of the number we would have to get to reproduce the line.

Q. Your theory of reproduction is that it would have taken eight years to construct the road in Minnesota?

A. Yes, sir.

Q. And you would use in the construction about 3,000 ties per mile?

A. Yes, sir, it would average about that.

Q. About 3,000 ties per mile, in round numbers, 2,700 miles of road?

A. Nearer 2,900.

Q. Well, call it 2,900.

A. I should have said over 2,800.

Q. Well, I will call it 2 900. It would take about a million ties a year; it would take, all together, for the whole system, just a trifle over 8,000,000; isn't that correct?

A. Yes, sir; it would take about a million ties a year.

Q. You have to constantly replace ties, do you not, that are rotting and decaying and becoming useless?

A. Yes, sir, year by year.

Q. About how many ties per mile do you have to use for renewal purposes, ordinarily?

A. Per year?

Q. Yes.

A. About 300, I think.

Q. About 300 is that high enough per mile?

A. It would come pretty close to that.

Q. How far would that come from a million ties a year, on your system now?

A. It would come a little less than a million ties per year.

Q. But very little less; so that, as a matter of fact, you need now, for the purpose or renewals, as many ties as you would need if you had undertaken to construct the entire system in this state in eight years, do you not?

A. Yes, sir.

Q. You would need as many annually?

A. About as many, yes, sir.

Q. So that the condition that would arise at the starting of the road-construction period of eight years would not be at all abnormal, so far as the quantity of ties that would be necessary is concerned?

A. Not so far as our company is concerned.

Q. So that that fact alone would not justify this excessive value that you have put in your estimate, would it? You would need that many ties now?

A. That, taken into consideration with the rapidly increasing price of ties that has been going on for the past years, in my opinion made it fair to use about the prices I have used as the average price we would have to pay for those ties.

Q. And that is the only explanation you have for using that price for the purpose of this estimate?

A. That is the explanation, yes, sir.

Q. That is the only explanation—and it is purely speculative and far beyond the reality, isn't it?

A. I think not; if you go back for a period of years I think you will find just about that condition exists.

Q. What condition?

A. The price has been increasing, the average price we would have to pay for the 8,000,000 ties required to reproduce the system in Minnesota would be very close to the figures I have given.

Q. Well, didn't you testify yesterday, Mr. Hogeland, that you were giving us your estimate of the cost of reconstruction on the basis of the prices of 1908; that is, as of June 30, 1908?

A. I did.

Q. That is not true as to ties, is it?

A. As to ties it should be corrected to the extent that the price would undoubtedly rapidly increase.

Q. Well, suppose it doesn't increase. Do you know that it is going to increase?

A. We have every reason to believe, Mr. Young, that it would increase; the tie-timber is rapidly becoming exhausted.

Q. But, as a matter of fact, your statement is not literally true, then, that this estimate was based upon last year's prices? This estimate of the cost of the ties in your road is based upon what you believe might be the price in the future?

A. Based on what is taking place.

Q. The prices that you were paying last year, in other words, were a great deal less than the prices you have given us here, as shown by the figures that you have read from this circular?

A. The prices offered for last year?

Q. Yes. Well, you were not paying more than you offered?

A. There is nothing that indicates that that was what was actually paid for all the ties secured last year.

Q. Well, that is substantially what was paid, isn't it?

A. No, sir, I don't think so.

Q. Well, do you know?

A. I think I stated to you that the average price that we paid for cedar ties in Minnesota last year was 66 cents, on cars, and for tamarack 60 cents.

Q. But the price you have put in here is 75 cents for the cedar and 65 for tamarack?

A. That is true.

Q. Did you ever pay such prices as appear here in this estimate for ties?

A. Yes, we have for a limited quantity.

Q. I mean for substantial quantities such as you use for renewals.

A. What would be your idea about substantial?

Q. Well, the ties that you buy for renewals.

A. 100,000?

Q. Yes.

A. Yes, we have paid that much for 100,000.

Q. When?

A. During the past three years.

Q. What kind of ties did you buy?

A. That would be cedar ties.

Q. You have paid as high as 75 cents for cedar ties?

A. Yes, sir.

Q. Do you remember what year that was?

A. During 1906.

Q. Did you say 100,000?

A. Approximately so.

Q. Well, you require a million ties a year, don't you, substantially?

A. Yes, sir.

Q. Well, as a matter of fact, the value of cedar ties has fluctuated a good deal more than the value of other ties, hasn't it?

A. I don't know that that is the case.

Q. I think that that is a matter of general comment, that cedar is a rapidly fluctuating timber; some years it may be worth considerable on the market and other years it is a "drug." The state owns a great deal of cedar,—I have had a lot to do with the matter; sometimes cedar will bring practically nothing on the market, and at other times it is in good demand. Don't you think that cedar naturally fluctuates more than the other kinds of timber?

A. Well, that isn't my understanding; it may be true.

Q. It may be. I don't know about cross-ties. Let me ask you, before I leave that subject of cross-ties, do you know of your own knowledge whether Mr. Farrington's testimony to the effect that in 1896 oak ties were worth 30 to 35 cents is substantially correct?

A. No, I do not know of my own knowledge. I only know that they as well as other ties have increased very rapidly in value.

Q. Do you know whether in 1896 his testimony that tamarack ties were worth from 20 to 22 cents was substantially correct?

A. It seems a very low price to me. It may be true.

Mr. HOLDEN: Does the testimony you are referring to, General, indicate at what point the values are put on the tie and where the tie is?

Attorney General YOUNG: Well, in northern Minnesota; that is the only place they can be got.

Mr. HOLDEN: Well, I mean—

Attorney General YOUNG: That is the market price.

Mr. HOLDEN: The market price where, under what conditions,—on the ground, or in the woods, or where?

Attorney General YOUNG: Oh, they are the old market, Cloquet, and such places.

Mr. HOLDEN: You are speaking about ties on the car or on the ground?

Q. That is the market price of the ties as they are delivered to the railroad company in northern Minnesota where they are produced, as I understand it?

A. Yes, and I think that statement refers to ties delivered on the right-of-way. It does not include any peeling or loading on cars.

Q. And you say it does not include peeling or loading on cars?

A. No. I am not talking about Mr. Farrington's testimony now; I don't know what he had in his mind, but I am talking about this notice that we have read the prices from.

Q. I want to call the attention of the witness to Item No. 6. This item gives the quantity of ballast used on your System and the price which you estimate it would cost to produce it or to furnish it in the process of reproduction of the road during the period of eight years?

A. Yes, sir.

Q. And is this estimtae to be taken in connection with your map, Exhibit No. 1? By that I mean does your map show the location of the pits from which this ballast is to be obtained.

A. Yes, sir.

Q. There appears to be nothing shown on that map with reference to pits except the pits that are at present active and now being used by the company for ballast purposes. There are a great many other pits that were used formerly, and from which the actual ballast upon the road was taken that do not appear on your map?

A. Which ones have you reference to?

Q. Isn't that true?

A. I was not aware that it was.

Q. Can you state from your own knowledge as to whether or not the map shows all the pits that were used in the construction of the road?

A. My understanding is that it shows all of the pits from which good ballast was or could be obtained. There are some pits from which sand or a very inferior ballast was obtained which do not show on that map.

Q. To what extent was your road ballasted from pits that do not show on that map?

A. To a very small extent, if any.

Q. There are some pits, you think, that were used, that do not now appear?

A. Some inferior material. You understand that what we return as ballast does not indicate all of the gravel or sand that has been hauled into the railroad, because a great deal of that settles down into the road-bed and cannot be properly considered as ballast now. It forms a part of the road-bed itself. So that a part of that undoubtedly came from pits which have been exhausted and do not appear on here. I didn't consider it fair to put those in as ballast-pits.

Q. Where did you get the basis for this statement of quan-

tities appearing in item 6?

A. They are from the actual condition of the road now, according to the best information we can get, and which is largely by testing and knowing. the amount of gravel ballast that is under the ties in the different portions of the lines now, not including the sand or gravel which has become compacted with the earthy material of the roadway and cannot now be considered ballast.

Q. It is not made up from records, then, it is made up from physical examination?

A. Not from records showing everything that has been put in in the way of ballast, sand or gravel, but what we consider now can be properly called ballast.

Q. Will you kindly give us the location of the pits that you claim the ballast was taken from?

A. Would be taken from?

Q. Was actually taken from. You didn't establish these pits at convenient places, you put them wherever they are found in fact, do you not?

A. Yes, sir; I figure that the ballast material could be obtained from—that any pit of good ballast which originally existed we should consider still exists.

Q. The location of the pits would have a good deal to do with the cost of transportation of the ballast would it not?

A. Yes, sir.

Q. Just kindly give us the location of the pits as you have marked them on the map, if you will.

A. Starting from the terminals St. Paul and Minneapolis. the first pit would be at Cedar Lake; the next at Hopkins. That constitutes all of the gravel pits on the main line to Breckenridge. On the line from Willmar to Sioux Falls, the Maynard pit and Russell pit; on the line from Benson to Watertown, the Appleton pit; on the line between St. Cloud and Willmar, the Roscoe pit and the New London pit; on the

line between Minneapolis and East St. Cloud, the Haven pit; between St. Cloud and Barnesville there are no pits from which gravel would be now taken. From Evansville to Tintah the Hereford pit; from Fergus Falls to Pelican Rapids, the Erhart pit; from Barnesville to Crookston, the Downer pit; from Crookston to St. Vincent, the Angus pit; from Sauk Center to Cass Lake, the Clarissa pit, and the Walker pit; from Coon Creek Junction to Foxboro, the Hinckley pit; from St. Cloud to Hinckley, the Mora pit; from Superior through to Crookston, the Lindsey pit the Flint pit, the Pike Bay pit, the Bagley pit and the Benoit pit; on the line from Barnesville to Ellis, the Para pit; and between Swan River and Hibbing, the Kelly Lake pit; and at the end of the Dewey Lake branch the Dewey Lake pit. I think those constitute all the pits.

Q. You know of no others that were used and the use of which has been discontinued?

A. I think there are some other pits, as I said before, from which sand or very inferior gravel was taken, but I wouldn't consider them as ballast pits and such pits as would be used in reproducing the ballast we have under the tracks now.

Q. Was there a pit at Kalb?

A. That is east of Grand Rapids?

Q. Yes.

A. I think there was material taken from a pit which you call Kalb pit, but not used for ballast purposes. I want to say that I think that the ballast pits as we have actually shown them make a comparatively reasonable haul for ballast. for some of the lines it is rather long, but as an average not what would be called a long haul for gravel.

Q. You have placed them wherever they could be conveniently obtained?

A. Yes, sir, I have placed them where I thought they did exist and would be used in reballasting.

Q. What is the average length of haul on ballasting?

A. I think it comes about forty miles.

Q. What have you included in the cost of the ballast?

A. I have included the stripping of the pits, the putting in of pit-tracks, train service, loading, hauling and unloading, the labor of loading, unloading, putting under track, dressing track, lining track, tools and supplies for steam-shovels and crews, putting gravel under, repairs to equipment and transportation charges.

Q. What have you allowed for transportation?

A. Exhibit 6 shows what the actual cost has been for nearly two million yards of ballasting done on lines constructed from 1901 to 1908, and that gives the best division of the cost that I can give.

Q. Calling your attention to the line from Brookston to Ellis, built in 1901, 46.09 miles, upon which there was used 143,100 cubic yards, please give us the details of the item there entered as train service, and also labor, tools and supplies.

A. I can't give it from anything I have here.

Q. Could you give us the details of that tomorrow?

A. Yes, I think I could.

Q. Just to illustrate, I think one item will be enough.

A. All right.

Q. While we are speaking about this map—you proceeded, you stated, on the theory that the lines in this state could be reproduced in eight years. In taking into account the period of reconstruction, did you consider the entire system at all, or just simply consider the lines in Minnesota?

A. I considered just the lines in Minnesota.

Q. And what did you take into account in considering the question of reconstruction—that there were no railroads in Minnesota, or that only your road had been taken out and was being reconstructed?

A. I took the last hypothesis, that the other roads existed.

Q. That the other roads existed?

A. But that the Great Northern did not.

Q. And did you contemplate the use of the other roads in removing the material and getting on the ground for the construction of yours?

A. Wherever that would appear to be economical, yes, sir.

Q. That is an original plan of yours, is it? You didn't find any case where that plan had been followed of estimating the period and cost of reconstruction, did you?

A. No, I had nothing of that kind to follow, but I thought it was necessary to formulate some plan in order to proceed intelligently with an estimate of the cost of reproduction.

Q. And according to your plan, when you got to North Dakota, you would also assume that your road was taken off of the earth and had to be replaced and that it would have to be replaced in that state alone during the period of construction that you allow for it?

A. No, for Minnesota I assumed that our line existed west.

Q. Oh you assumed that it did exist west?

A. Yes, sir.

Q. And that the line had been obliterated in this state only?

A. That is right.

Q. I just wanted to get at your plan.

A. That was my plan.

Adjourned until the morning of Thursday, March 18, 1909, at 10 o'clock.

Federal Building, St. Paul, Minn., Thursday, March 18, 1909.

The hearing was resumed at 10 o'clock A. M.

ALBERT H. HOGELAND,

recalled for further cross-examination, testified:

By Attorney General YOUNG:

Q. Calling your attention to your Ex. 4, you stated I believe, in your direct testimony, Mr. Hogeland, that Ex. 4 was compiled from the records in your office, after the prepa-

ration of the page marked Item 2, on your Exhibit 2; I believe I asked for details as to the construction of the line from Cloquet to Boyleston and from Deer River to Fosston; that I suppose you haven't got?

A. That was for the ballasting, wasn't it?

Q. That was on the cost of grading.

A. No, I think you asked for Kelley Lake to Fermoy. That I am having drawn up.

Q. Calling your attention to Item No. 7 of your Ex. 2, being the rails, this item purports to show the total number of tons of rail in the road in Minnesota, as I understand it?

A. Yes, sir.

Q. And you stated that you gave the prices on 60,000 tons of rails purchased in 1908; is that correct?

A. Yes, sir.

Q. Were the rails purchased by your company in 1908 different from the ordinary commercial rails used by roads generally?

A. No, sir.

Q. They cost the same price, did they?

A. They were bought from the regular rail mills.

Q. And at regular current prices, of the same weights?

A. Presumably at regular current prices.

Q. What did you pay?

A. We purchased from the Illinois Steel Company 8,076 tons first quality at $28 a ton,—to which should be added $1.75 freight to St. Paul; we also purchased from that company 424 tons second quality at $26.60, Chicago,—to which should be added $1.75 freight to St. Paul; we further purchased from that company 10,709 tons first quality at $28, plus the $1.75 freight to St. Paul; 849 tons second quality at $26.60, plus the $1.75 freight to St. Paul; we purchased from the Bethlehem Company 4,691 tons first quality, at $30 at Bethlehem, plus $5.85 freight to St. Paul; 320 tons second quailty, at $28.50, plus

$5.85 freight to St. Paul. The above covers 25,069 tons at an average price of $30.88 at St. Paul. We purchased of the Pennsylvania Steel Company 4,795 tons, first quality, at $33.20 laid down at Superior; 205 tons second quality at $31.70, laid down at Superior; we purchased of the Lackawanna Company 14,250 tons first quality, at $28.90 at Superior; and 750 tons second quality at $27.50 at Superior. We purchased of the Maryland Company 4,751 tons first quality at $31.20 at Superior; and 249 tons second quality at $29.80. Superior. We purchased of the Cambria Company 9,288 tons first quality, at $30.30 laid down in Superior, and 643 tons second quality at $28.90 at Superior; making a total of the rails delivered at Superior of 34,931 tons at an average price of $30.17 at Superior, or an average price for the entire 60,000 tons of $30.47, either at St. Paul or Superior.

Q. How does the price paid for rail last year compare with the average price for the period of five years preceding?

A. I think there has been very little difference.

Q. A little higher last year, wasn't it?

A. I think not; it may have been at some points, but generally there was very little difference.

Q. It was higher last year than it is now?

A. Not for steel rails as I understand it.

Q. Hasn't there been a recent reduction in price of steel rails?

A. Not that I have been advised.

Q. It has been generally announced, hasn't it, in the public prints?

A. I have seen it in the papers, but I have followed it up pretty closely and I haven't been able to ascertain that there has been any cut in steel rails; there has been in other steel products.

Q. You haven't purchased any, have you?

A. Yes, sir, we have purchased some steel rail this year.

Q. Within the last three months?

A. Yes, sir, within the last six weeks.

Q. What are the quotations on steel rail now?

A. I think the same as last year, $28 at Chicago. I am speaking now of the last purchase we made.

Q. When was that made?

A. During the month of February.

Q. That is, during last month?

A. Yes, sir.

Q. Are not the rails that you have mentioned and upon which you have quoted prices under the head of "first class' rails prepared specially for your road, and heavier, and different kind of rail from that which is used on the road generally, or which has been used on it?

A. They are rolled to a different section from what the other roads use, but under no different specifications.

Q. Do they cost a little more?

A. No, sir, the price is the same.

Q. Are the rails with which your system is now provided of the same quality as those which you have mentioned?

A. They are equally good and a little better quality; the rails that we secured ten years ago are better rails than we are getting today.

Q. In what way?

A. In the matter of both wear and breakages, and give better service.

Q. Do you know of any reason for that, or is it merely a matter of observation?

A. I think all engineers agree or it is a well-known matter that steel rails obtained in the last few years have not been of the quality that were secured ten years ago.

Q. But you couldn't state what the defects in the recent rails are.

A. Why, I have my opinion, but that wouldn't probably

agree with the manufacturers' ideas on the subject.

Q. Are not processes of manufacture of steel being improved, instead of deteriorating? Aren't we advancing?

A. Not in turning out better quality, no, sir; in turning out more tonnage they have succeeded, but they haven't improved the quality.

Q. What concern is it that furnishes the rails mainly?

A. Well, the concerns that I have mentioned are the ones that we purchased from.

Q. At the time that your road was built, rails obtained during a portion of the time I presume cost more than they are quoted at now per ton, and at other times cost less; the price of last year isn't a fair measure of just what the rail in the road cost, is it?

A. Per ton?

Q. Yes.

A. Yes, sir, I think it is.

Q. Are all the rails in your road of the same weight of those you purchased during the last year?

A. No, sir.

Q. And the rails per mile, then, would have cost less where a lighter rail was used. Is it your opinion that the price last year, taken all in all, is a fair measure of the cost of the rails in the system?

A. Yes, sir, it is.

Q. The higher prices quoted in your statement were from points other than Chicago; the price during the time that you have mentioned in your statement at Chicago was $28 a ton, was it not?

A. Yes, sir.

Q. And the freight from there is $1.75?

A. Yes, sir.

Q. Which would be $29.75, market price. Now, in Item 8, of your Ex. 2, relating to track fastenings, how did you obtain

the quantities enumerated in that item?

A. From records as to the kind and weight of angle-bars and bolts that go with each section of rail, and knowing the location and amount of the rail of each kind, we of course could figure the amount of angle-bars and bolts that go with that.

Q. But you assumed the quantity of angle-bars and bolts from the records of the rail used?

A. Yes, we knew that a certain kind of angle-bar went along with a certain rail.

Q. And how did you ascertain the quantity of tie-plates, and number?

A. That was from records as to the number that have been placed in track. The track is not fully tie-plated.

Q. And is this your actual record and number?

A. Yes, sir, this is our record of what is in the road.

Q. Actually used?

A. Yes, sir.

Q. And how did you get at the price?

A. Based on what was paid.

Q. Last year?

A. Actually paid last year, yes, sir.

Q. How do the prices of these track fastenings, last year's quotations, compare with the prices in the five years preceding?

A. There is very little difference.

Q. Were they more or less?

A. I couldn't say, but there is practically no difference.

Q. And as to the switches, frogs and railroad crossings, in Item 9, are these items taken from the records?

A. From our records, and from what actually existed on the ground.

Q. I suppose you have a record of everything that actually exists on the ground in the state?

A. We have yard maps of all our yards, from which the number of switches can be drawn off.

Q. And the prices are last year's prices?

A. Yes, sir.

Q. What, if any, difference between those prices and the average prices for the five years preceding?

A. I think there would be very little difference.

Q. What is the difference between the prices given, in your opinion, and the actual cost?

A. The prices are based on actual cost.

Q. I mean, what was actually paid for those parts of the road when they were constructed and placed in position. I mean what was paid for them at the time they were put in.

A. I think there would be very little difference.

Q. Do you know?

A. I am giving you my opinion.

Q. It is not a very considerable item, I think we will not waste much time on it. Item No. 10 covers the subject of track-laying and surfacing; and in this statement, you give the miles of track in each subdivision into which you have divided the system, the number of switches and crossings, and at the bottom you give the cost per mile of the track-laying of the switches, and of the crossings, separately; how did you get at that cost of track-laying?

A. That was based on my judgment of what it was costing to do that class of work.

Q. Was costing last year?

A. Yes, sir, and for preceding years; and in order to verify that I had a statement prepared as shown on Ex. 7, showing what it had actually cost us for track-laying since 1898, covering 1,565.87 miles of railway.

Q. Ex. 7 purports to be made up from your records?

A. From the construction books.

Q. A very large part of the cost as appears from Ex. 7, consists of train service and of transportation, something for repairs of equipment; could you give us something of the details

which go to comprise those items of cost?

A. What kind of details have you reference to?

Q. Well, we would like to know what makes up that train service, what it is for, and what it is you have included in these transportation charges.

A. It is pretty well explained at the bottom of the exhibit. Under Train Service is included all train service in material yard, hauling track materials to the front, handling track-laying machine and moving boarding outfits and men. Each item is explained in that way at the foot of the statement.

Q. What do you mean by train service?

A. Just what is said there: The expense of locomotives and train crews in handling material in the material yard, doing the necessary switching and hauling the track-material to the front, handling track-laying machine, and any other train service actually connected with the track-laying.

Q. Does that simply embody the fuel used in the engine and the salaries of the train crew, or the wages of the train crew, or does it include something else?

A. It includes just those items: Wages, fuel, and supplies of any kind used by the locomotives.

Q. It does not include anything for the use of the transportation facilities?

A. No, sir; there is no rental of equipment in there at all.

Q. What is included under the head of transportation?

A. Under transportation is general transportation charges for men engaged on the work, track-laying and surfacing, and that means getting the men to the work or from the work, if they have to be brought; not while they are engaged on the work, but in getting them there and bringing them back, if necessary.

Q. That is, assuming that the men were all employed or obtained at the terminals? Do you always have to transport your men from the large cities to the place where the road is

being constructed?

A. We usually do, yes, sir.

Q. And at what rate do you charge transportation to the cost of construction; that is, at what rate of transportation do you charge up that item?

A. My understanding is tariff rates.

Q. And wherever transportation appears in any of your estimates it means transportation at the tariff rates?

A. That is my understanding.

Q. And that is true where you furnish the transportation yourself, or where—well, of course, you always furnish the transportation yourself, you don't pay transportation to another company?

A. Oh, very often, and we would in this case.

Q. You would in what case?

A. In the case of reproduction of our lines in Minnesota.

Q. You would start out to reproduce your lines with other lines existing, I think you said?

A. Yes, that was the scheme.

Q. Well, I have been trying to get into my head some conception of that sort of a way of building a railroad; did you ever know a road to be built in that way?

A. Yes, sir.

Q. According to the scheme that you have proposed for the reconstruction of the lines in Minnesota?

A. Yes, sir.

Q. Where was it?

A. The Great Northern itself was built that way in Minnesota; it had lines in the Red River Valley before they were connected with the other part of the system.

Q. As a matter of fact, the building of a railroad is a process of evolution; railroads are built where they are needed, and they are built as they are needed. What I mean is, did you ever know of a case of a system of railroad being started

and mapped out as a complete system in a state and being built in a state as a single enterprise, according to such plan as you have attempted to portray here on this may No. 1?

A. Why, yes, sir, it follows very closely the plan on which the Great Northern actually was built.

Q. Were all these lines projected by the Great Northern before any of them were built?

A. Oh, no, sir.

Q. Some of them have been purchased from other companies and were taken as the other companies happened to have built them, were they not?

A. That is true to a very limited extent.

Q. But as a matter of fact, in the main, your system was built from St. Paul towards the west, so far as Minnesota is concerned?

A. And the head of the lakes, west.

Q. And from the head of the lakes west, but the original lines were built from St. Paul towards the western boundary of the state?

A. Yes, sir, and I have shown it that way in that map; very largely from the lake and eastern terminals.

Q. Yes. Well, now then, Mr. Hogeland, I think you stated that in this assumption of conditions which do not exist and never could exist, that you have, according to your plan, taken the railroad out of the state of Minnesota, but you have left it in the territory west, and that you have started out to reproduce it from the eastern terminals of this state to connect with the road which theoretically already exists to the west. Do you believe that it would be a wise and feasible plan, under those circumstances, to do the work at all these separate and disconnected spots in the system, in order to consume eight years?

A. There is only one case of separation, working from the terminals, and that is in the case of the Red River Valley.

Those lines in the Red River Valley have been separated, and, as I say, they were produced (originally built) to a considerable extent that same way.

Q. Well, now, if it were possible to assume the situation upon which that map of reproduction seems to have been based, do you think that with the railroads existing as the Great Northern system exists west of this state, and no railroads building to that system in this state, reaching these two great cities, and the city of Duluth, that you would start out and construct the road according to that plan, or would you not attempt at first, and as quickly as possible, to connect the large business centers with the system to the west, so as to place the road on a producing basis, as early as possible, or some portion of it?

A. I think that plan would accomplish that.

Q. It would accomplish it, but do you think it would be considered a rational plan of construction to say that you ought to take eight years to connect St. Paul and Minneapolis with a railroad system existing on the western boundary of the state, if conditions in Minnesota were as they are now, and your road didn't exist in the state? Would you want to commit yourself to the proposition that that would be a wise way to construct your road?

A. This plan shows it would be connected at Breckenridge in the fourth year, which would afford a connection to the west.

Q. Well, it would be possible to connect it in one year, wouldn't it?

A. I don't think so.

Q. Why not?

A. Because you couldn't get the men and steam shovels and outfit to do it.

Q. Well, if you are going to assume other matters, why didn't you assume that there are men enough to do that work? You are assuming so many things that don't exist, why are you

justified in assuming that?

A. What things do I assume that do not exist?

Mr. HOLDEN: That is merely argumentative, Mr. Hogeland, and merely consumes time.

Q. Now, we will leave that. I think we would like to know whether this is a wise way or not. It may consume time, but we are trying to get a little information.

Mr. O'BRIEN: I think if the counsel is going to carry on an instruction to the witness, he ought to sit where the matter can go in the record and have it properly considered.

The MASTER: Yes, if there is anything that is pertinent, I would like to have it in such a manner that I will take it in. The cross-examination seems to be entirely proper up to now.

Q. I will put that question in a fairer form: you have assumed a thing which I believe, Mr. Hogeland, is unjustifiable when you assume that all the physical conditions that now exist in this state would exist if the Great Northern Railway System were not in existence, and when you start out to reproduce that road, would you not be justified in assuming that the company undertaking the task would have the capital with which to construct the road, and that the labor market would afford the men that would be necessary for the enterprise and that the promoters of the undertaking would have the necessary apparatus to carry on the work, with the men that they would employ, and if all those things were assumed with reference to the construction, there is no reason why there could not be a connection made between the commercial centers in this state and the western boundary of the state in a single year, is there?

A. Not if you paid enough money for it, but I blocked it out in the most economical way, in my opinion, of doing it.

Q. Well, isn't it a fact, Mr. Hogeland, now to be candid, that if you were to take eight years to do that work, you would be permitting to accumulate a vast charge for alleged interest on idle capital that would very much enhance the cost of the

undertaking beyond what it would cost if built more expeditiously?

A. That was the very reason for going up into the Red River Valley and doing a part of the work, so that by the time we reached there the system would be practically complete.

Q. Now, upon what theory did you apportion to the Red River Valley the part of the work that ought to be done the first year, what made you apportion just that amount of work to that year and no more?

A. As I explained in my direct examination, the apportionment was made on the basis of dividing up the steam-shovel work and the team-work about equally into the eight-year period, figuring that practically one-eighth of each class of work should be done each year, and that was the principal consideration that guided that method of accomplishing it.

Q. Well, but why couldn't all the steam-shovel work that is necessary to be done on the system be done in one year?

A. It is impossible to do it at reasonable prices.

Q. Why would that change the prices?

A. To do eight times as much work in one year as I have figured upon, don't you think that would increase prices?

Q. Well, it might increase prices some, but do you think it would increase the prices as much as the interest you have computed on alleged idle capital?

A. Yes, sir; very much more so.

Q. Couldn't it be built in two years or three years, instead of eight?

A. The entire system?

Q. The system in the state. Or let me ask it in this way: could not there have been constructed in the state that portion of the main line which connects the Twin Cities and Duluth with your railroad to the west, in two years at the most, so that the main line could be used for commercial purposes?

A. Which portion did you figure, Mr. Young?

Q. The main line from St. Paul and Minneapolis to Moorhead, and from Duluth to Crookston.

A. No, sir; I don't consider it could be built in that time—

Q. Why not?

A. —at a reasonable price.

Q. Well, now, I don't exactly comprehend why the price should be so very much more if it was built more expeditiously.

A. It is like every other thing, if you go into the market for a large amount and the supply is only sufficient to supply half that amount your price immediately rises.

Q. There isn't any scarcity of labor at the present time, is there?

A. There has been during the past five years, a very great scarcity.

Q. But speaking of the period that we are now living in, there is a very large proportion of the labor of the country unemployed, is there not?

A. Not according to my observation.

Q. Well, isn't that according to statistics and general knowledge?

A. Not that I have seen; no, sir.

Q. Well, you may not have seen it, you are probably in your office at St. Paul, but don't you know that that is true?

A. No, sir; I do not.

Q. Well, you assume that labor is all employed, do you, in order to verify the plan that you have?

A. No, I assume ordinary conditions, the same conditions that we have had to contend with during this period of grading of which I have made a tabulation.

Q. We have a population in this state now, of over two millions from which to draw labor for this enterprise, and of course the supply of labor for an enterprise of that kind is not limited to any state; the population is many many times greater all over the northwest than at the time when the road was actually

built, is it not, so that labor conditions could justifiably be assumed to be more favorable now than when the road was built?

A. No, sir; not at all.

Q. Not at all?

A. No, sir; our experience in the past five years shows that to be untrue.

Q. Have you had any difficulty in getting men to carry on your work?

A. Very great difficulty.

Q. When?

A. Last season.

Q. Last season?

A. Yes, sir; last season.

Q. 1908?

A. Last season.

Q. What kind of work was it you wanted to do?

A. The completion of the Billings & Northern I have more particular reference to.

Q. That is on the Pacific coast?

A. No, sir; that is in Montana.

Q. It is west of here and on your line in Montana. What class of work was that?

A. Track-laying, ballasting.

Q. You were unable to get men?

A. We got them, but we had to keep continually replenishing them, sending them out.

Q. Why was that?

A. The class of labor we get these days doesn't want to work; they will work for a few days and then move on.

Q. What time of the year was it?

A. During the entire working season, beginning with March and ending with December.

Q. During a considerable portion of the summer the wages paid in the harvest fields draws away your men?

A. That would be true in Minnesota, the western part of Minnesota, and in North Dakota; it was not true in Montana.

Q. Well, it would prevent the men from going out there, or cause them to return to get the better wages offered?

A. Yes, but that is an ordinary condition that you have to contend with.

Q. Now, during all of the time when you are allowing, as appears by your exhibit, a certain charge for transportation in this eight-year period, that you have selected arbitrarily, you are also allowing interest, are you not, upon the cost of the equipment?

A. No, sir.

Q. You stated, I think, in your testimony yesterday, that the equipment of the road would have to be purchased sufficiently in advance of the commercial use of the road so that it could be used in construction, and therefore you allowed on an average of two years' interest on equipment?

A. That is true.

Q. Now, then, that two years' interest on equipment was in order that the equipment might be on hand to be used in the process of the construction of the road, was it not?

A. Partly for that, and partly to anticipate the payments that would have to be made for equipment before it was delivered.

Q. Well, how much of it was on account of the use that would be made of the equipment in the construction of the road?

A. Possibly a half of it.

Q. "Possibly,"—well, is there anything more definite than a possibility in your allowance?

A. That would be as near as we—

Q. Do you have any basis upon which to make that computation?

A. I figure that that would be approximately what the division would be.

Q. In your testimony on Monday I don't think you made any reference to that; you stated that the equipment would have to be on hand in time to be used in construction. Now, if the equipment is to be on hand for use in construction, and you are allowing interest on the investment because it has been purchased and is so on hand, is it also fair to charge the regular rates for transportation arising from the use of that equipment? Isn't that duplication of cost?

A. I don't think so.

Q. Well, how do you explain it?

A. The equipment which you would purchase in that way would be for your track-laying and ballasting from your ballast pits or material yards, and the transportation charges which we have put in simply carry it from the terminals to your material yard.

Q. Well, why should there be any allowance for transportation over your own partly constructed lines of your own equipment, for the purchase of which you are already allowing interest?

A. I have not allowed interest on that part which is used for that purpose. The interest which I figure, would be for the equipment which is at work ballasting, track-laying and putting up your bridges and buildings, advancing from your material yard, and the transportation charges cover the handling of your material from the terminals to those material yards.

Q. Do you think it is a fair proposition in estimating the cost of producing a railroad, if there should be anything allowed for transportation, to include commercial rates?

A. I do.

Q. Commercial rates ordinarily include not only the cost of the business, but a profit to the stockholders; don't you think that the actual cost is the item that should be computed and charged to the public as a part of the cost of the road?

A. Yes, sir; and I believe the tariff rates come as near that on this class of transportation as you can get, and I say that because you are transporting material over a road that is in a very incomplete condition, a great deal of it skeleton track, soft roadbed, light trainloads, trains going empty in one direction, and everything tends to increase the cost, and you can't figure what it costs to conduct such transportation the same as you would on a fully equipped and operated railroad.

Q. As a matter of fact, Mr. Hogeland, the company having its equipment on hand, should charge only the cost of the crew, the coal and depreciation, should they not?

A. For what purpose are you speaking now?

Q. Speaking about construction.

A. For what part of the work?

Q. Any part of the work. It is neither logical nor justifiable upon any theory that I know of to undertake to make a profit on the process of construction?

A. I haven't attempted to show that in my estimate.

Q. Now, then, you either allow interest on the investment in equipment (which would preclude the right to charge for the use of it), or you estimate that it is on hand and available to be used for the pur[illegible]e of construction. In the latter case, with the equipment on hand and the road to be constructed, the thing that the company is entitled to is the diminution in the value of that equipment which arises out of its use for construction, and, in addition to that, the cost of the crew and of the coal and of the steel and of the various things that are necessary to be used during the use, is it not?

A. That applies fully to track-laying and ballasting from the material yards, and I have taken it that way, and in making up my statements of ballasting and track-laying, as shown on Exs. 6 and 7, you will note that I have cut out the charges for rental of equipment.

Q As a matter of fact, when the Great Northern System

was actually constructed it was built in parts, or evolved, as might be said, out of the necessities of the country through which it passed, and there was no part of it which was anything like eight years idle after the construction of it was undertaken within this state, was there?

A. Yes, sir; the part in the Red River Valley was practically idle.

Q. What part?

A. The part from north of Crookston laid idle for a number of years.

Q. North of Crookston?

A. Yes, sir; Crookston to St. Vincent.

Q. In what way do you mean? The grading was done—

A. The track was laid.

Q. The track was laid?

A. Yes, sir.

Q. Why didn't you operate it?

A. I can't tell you, sir. I don't know how many years, but it was idle for a number of years.

Q. Just name the section of the road.

A. Section 24.

Q. Will you state just when that was constructed and when the use of it was commenced?

A. I would have to give you that from memory.

Q. Do you know?

A. I can give it to you accurately from our records.

Q. And can you give the reason why it was not used?

A. Pretty largely, I think, on account of the financial reverses that came at that time.

Q. When was it built?

A. About 1873.

Q. It was built in advance of there being any necessity for it, was it not, in that particular section of the state?

A. Why, I suppose they thought there was a necessity for

it, or they would not have started it.

Q. But that is the only portion of the road that you know of that was built and was not used for a considerable period after it was constructed?

A. That is the only part I recall now.

Q. And the circumstances pertaining to that were extraordinary, at least so far as the depression of 1873 was concerned, and that may have had something to do with it; isn't that true?

A. I think that is true.

Q. So that, as a general proposition, Mr. Hogeland, when you start out with the statement that the construction of a railroad within this state is going to take eight years before it will be productive, you are not basing your statement on any actual experience in the construction of any of the lines in this state, but basing it wholly on your theoretical process for the reproduction of the road as a system?

A. Why, no, sir; I am basing it on my experience and judgment combined.

Q. Well, neither your experience nor judgment ever was called upon to construct a road according to the plan that you have outlined on that map, was it?

A. Of course, no one has been called upon to reproduce these lines in Minnesota, but in order to—

Q. Or anywhere else?

A. —but in order to get at the question intelligently it was necessary to block out a system covering the reproduction, and while someone else might work out another system, that, in my opinion, represents a practical way and an economical way to reproduce the lines in Minnesota.

Q. Why didn't you follow the plan by which the road was actually built, giving the sections of it that were built each year and following the same method?

A. I didn't think that would be the most economical method to reproduce it.

Q. It would at least have the merit of resembling actuality, wouldn't it?

A. Yes, but that was not my main object; my main object was working it out in the most economical way.

Q. I should probably be obliged to take exception to that statement, notwithstanding your undoubted character for veracity, which I am not assailing, but I think your testimony shows that you have taken prices vastly in excess of what would be necessary.

A. What prices have you reference to?

Q. Well, I take the whole scheme, when you attach the prices of 1908, to everything comprising your road; I would say, as a general proposition, that it is evident that that was done because the prices at that time were very high.

A. Not higher than they were in preceding years.

Q. Wasn't labor the highest during 1907 and the first half of 1908 that it has ever been?

A. No, sir.

Q. Well when was it higher?

A. I think for the five-year period preceding 1908 the average would show about the same as for last year.

Q. Yes, it had reached the crest of the wave about the first part of 1908, had it not, and since then it has been going downward?

A. Not to any marked extent; no, sir; we are paying about the same for labor today as we paid the last of 1907.

Q. The same is true of steel products, the same is true of lumber, and other things that are necessary for the construction of your bridges and buildings—there has been a marked depression in prices since the middle of 1908, has there not?

A. No, sir; lumber prices in 1908 were lower than they had been for five years previous. Steel prices—

Q. You are confining yourself to 1908?

A. I am taking the same items you mentioned.

Q. But I am talking about the last half of 1907 and the first half of 1908, before the starting in of the alleged panic. That took place, I think, at the end of 1906, didn't it?

A. The latter part of 1907 I have always thought it was considered.

Q. Well, the latter part of 1907 and the first part of 1908; it became acute about the middle of 1908, didn't it?

A. It seems to me that argument would simply uphold my contention that the prices of 1908 were not inflated.

Q. Now to bring that to a close—I don't want to engage in any controversy with you—you don't pretend to say that the prices that you have given are the prices that the road actually cost?

A. No, sir; I have not said that.

Q. Or anything like it?

A. Anything like it? Yes, anything like it, but not the prices.

Q. How much more would the cost be, based upon the prices that you have given, than the actual cost, in your opinion, of the road in Minnesota?

A. I am not sure that it would be any more.

Q. You are not sure that it would be any more?

A. No, sir.

Q. Well, I wish, in order to verify your estimate, then, you would furnish us the items of the actual cost on these various things that you have given us the prices on. Would you be willing to do that?

A. As far as I could, Mr. Young, but I would want you to specify what you want.

Q. Well, we want the whole thing.

A. Well, you can't get that in any reasonable time.

Q. According to your estimate, the cost per mile of the road in Minnesota would be about how much?

A. I think it is about $70,000. I have not shown that.

Q. You know, as a matter of fact, do you not, that it cost less than $30,000?

A. No, sir; I do not.

Q. Well, your company are supposed to have made accurate reports to the state railway commission of the cost of the road in Minnesota, are they not?

A. I can't tell you as to that.

Q. Do you know that they have reported the road in Minnesota as costing not to exceed $27,000 per mile?

A. No, sir; I do not.

Q. Well, if they had so reported, would that change your opinion as to your estimate being excessive?

A. No, sir; it would not.

Q. Would it change your opinion as to there being a material difference between your estimate and the actual cost?

A. That would have an influence on it.

Q. You might give them credit for some veracity, in other words. In making up and forming your opinion as to the accuracy of your estimate, did you ever consult any of these reports to the Railway Commission, or the records pertaining to the cost of the road as shown by these reports to the state, or to the interstate commerce commission?

A. No, sir; not those figures.

Q. Is it any part of your duty to furnish any of the data for those reports?

A. We furnish the quantities, I think, that are called for, as to the amount of grading and bridging and work of that kind, which has been carried out.

Q. Do you know what the capitalization of the road was when its extension beyond the boundaries of the state of Minnesota was commenced?

A. No, sir; I do not.

Q. You do know, do you not, that at any stage of its existence the road and equipment did not cost more than the capi-

talization, and it might have cost less? In other words, the Company must have obtained the money to pay for the right-of-way and for the structures comprising the road at the time that they were brought into being?

A. It would seem reasonable to suppose that.

Q. Your estimate of the cost of reproduction vastly exceeds the present capitalization of the road, does it not?

A. Are you talking about the System?

Q. I am talking here about the System in the state of Minnesota.

A. I can't tell you about Minnesota, I don't know how the capitalization would be divided.

Q. Well, how about the System? It greatly exceeds the capitalization of the System, does it not?

A. I don't know as you can say greatly exceeds it exceeds it.

Q. Do you know how much?

A. No, sir; I do not know how much.

Q. How long did you say you had been in the employ of the Company, Mr. Hogeland?

A. About twenty-five years all together, beginning in 1879; but during that period I was with the Northern Pacific between four and five years.

Q. Well, you do know, do you not, that since the year 1879, when the Manitoba Company acquired the old lines of the St. Paul & Pacific and the other lines that constituted the nucleus of the Manitoba system, that the Manitoba and Great Northern (its successor) have been under the same ownership and management?

A. I presume that is true, although I would have no means of knowing whether that is strictly correct or not.

Q. You know as to the management, that Mr. Hill and his associates have been in charge of the road since they acquired it in 1879?

A. Yes, sir.

Q. And since that time there are complete records are there not, of the cost of all lines that have been since constructed and all additions made to the original lines then acquired?

A. No, not at all.

Q. There are not complete records?

A. Not complete; no, sir.

Q. Do you know why they are not complete?

A. Some of the lines, of course, were purchased, and of those the records were very incomplete.

Q. Well, leaving out the lines that were purchased—which were inconsiderable compared with the lines comprising the System—

The MASTER: General, I don't quite understand you.

Attorney General YOUNG: I said leaving out the lines that were purchased and confining this question to the lines constructed by the company and additions made by the company, you have complete records as to those.

WITNESS: I can't say that they are complete. We have records which are in pretty good shape of the new work which has been done since that time.

Q. You have records from which the cost of the System—and by that I do not mean this theoretical cost of reproduction, but the actual cost of the system—could be ascertained.

A. I think not. I am quite sure we have not.

Q. You have records, have you not, from which the cost of all that portion of the line which was constructed by the Manitoba or the Great Northern or the subsidiary companies of the Great Northern could be ascertained?

A. No, I don't think they are complete.

Q. Aren't they sufficiently complete so you could give substantially the cost?

A. They would not be from any records in the engineering department, and those are the only ones that I can speak for.

Q. Well, can you give me any reason why the records of the

engineering department are not complete, during that period from 1879?

A. As I said before, for lines purchased our records are not complete.

Q. That is left out of my question.

A. You spoke of subsidiary companies, I don't know just what you mean by that.

Q. Well, I mean by that such companies as the Minnesota and Great Northern, and the Dakota and Great Northern and the Montana and Great Northern and other construction companies that were used for building portions of the line within the states in which they were formed.

A. The engineering department records would be complete for the new lines built by the Manitoba or the Great Northern since about 1880 but these records would cover only whatever work was done by contract, would not cover the purchases of ties and rails and building material, bridge material and all items of that kind.

Mr. How: Equipment?

WITNESS: Equipment.

Q. In the engineering department you have no record of those matters, but the department charged with the duty of providing them would necessarily have a record, would it not?

A. I can't say as to that.

Q. Well, of course, you probably wouldn't know of your personal knowledge. So far as the work is concerned you have a record of what was done and the time consumed in doing it?

A. Of the different lines; yes, sir.

Q. Now, let me ask you, Mr. Hogeland, whether in your effort to get at the cost of reproduction you considered at all the condition of the road in which it was turned over to the operating department and without regard to that constant addition and betterment which is constantly going on, or whether you made your estimate based on the condition of the road as it now exists.

A. As nearly as possible in the same physical condition that it now exists.

Q. There has been a very large sum of money expended on the road in the way of improvements and betterments since it was turned over by the construction contractors to the company; you are not able to say, are you, from what source the cost of making those improvements was taken?

A. No, sir.

Q. That is, whether it was paid for out of earnings or paid for out of capital?

A. No, sir; I can't tell you.

Q. What proportion, in your opinion, of the cost of the present road arose after it was turned over from the hands of the contractors to the operating department?

A. I couldn't say as to that.

Q. You didn't make any computation of that?

A. No, sir.

Q. It would be safe to say that half of the cost of the road as it now stands accrued in that way, would it not?

A. No, I wouldn't attempt to say that at all.

Q. Well, you do assume, do you not, that if it were necessary to reproduce the Great Northern System, all of the expense for those betterments and improvements of the road would be paid for in the same way that they have been paid for; that is, the portion of them that have been paid for out of earnings would be so paid under your plan, and the portion that was paid out of capital would be paid for in the same way?

A. Why, no, not at all.

Q. You assumed that it would all be paid out of capital, did you?

A. I assumed that that would be the cost of reproduction.

Q. That would be the capital cost?

A. The cost of reproduction.

Q. And all chargeable to what is known as Capital Account?

A. I don't know how it would be charged, but that would be the cost of reproduction.

Q. The portion of the expense that has been paid from earnings would have to be ascertained from the accounting department, you know nothing about that?

A. I wouldn't know anything about that; no, sir.

Q. The Great Northern System has followed the usual practice so far as paying the amount that has actually been paid for out of earnings, has it not?

A. I can't say as to that.

Q. You stated, I believe, you would have those details at about 2 o'clock?

A. I think I will have the one for the grading but not the one for the ballasting. The charges occur in a large number of pages and it takes quite a little while to draw them off in any way that would be of any service, but the one covering the grading of the Kelly-Lake-Fermoy line I will have after lunch.

Recess till 2 p. m.

AFTERNOON SESSION.

Q. Going back to your Exhibit No. 2, Mr. Hogeland, which purports to be the cost of grading clearing and grubbing upon the lines in Minnesota, you classify the different kinds of earth as No. O, No. 1, No. 2 and No. 3, and at the foot of the page you give a summary purporting to be a statement of the cost of moving the different kinds of earth so classified, and in that summary you have earth No. O, at 18 cents; is that the price which you claim would be actually paid for the work?

A. It is the price which I think would have to be paid to cover all charges; that is, it would cover what was paid contractors, and in addition extra charges due to overhaul, extra bills, transportation of men and grading outfits, etc.

Q. The figures which you have given here, then, Mr. Hogeland, are not the figures which you claim it would be neces-

sary to pay to contractors for the work but these various figures have been increased by an arbitrary amount which you think it would be necessary to add to cover these additional charges?

A. Yes, sir; in my opinion those would represent approximately what the work would cost.

Q. Well, now, what arbitrary amount did you add in those various cases—can you tell us?

A. No, I made those figures before I had completed the statement as shown on Ex. 4, and they were made to represent my judgment as to what that work would cost; and the figures on Ex. 4 were made to confirm my judgment.

Q. Now, on Ex. 4 there appear various specific instances of construction work; Ex. 4 includes some construction in Minnesota and some construction outside of the state?

A. Yes, sir.

Q. In fact, most of it is outside of Minnesota, is it not?

A. Most of it; yes, sir.

Q. And the prices which you have given in your page entitled Item 2 for the various classes of earth that it would be necessary to move are higher, are they not, than the average price for earth appearing under actual construction; that is, they are higher rather than the minimum prices for moving all earth involved as to several of the lines enumerated on Exhibit four?

A. I don't think I get the meaning of that question.

Q. Well, I find on Ex. 4 that the average price for moving earth, outside of hard-pan or rock, or, rather, the aggregate price for moving earth in case of specific lines, runs, in some instances, as low as 13, 14 and 15 cents per yard; for instance, the price for moving earth on the Granville to Mohall line is 13.3 cents, Mohall to Sherwood, 13.1 cents, Towner line 13.6 cents, Westhope Extension 14.4 cents, and the average price paid for moving earth in all of the lines enumerated on Ex. 4

is 19.3 cents; now, the lowest price which you give for moving earth in your proposed reconstruction of the Minnesota lines is 18 cents, that being earth of the classification No. O. The prices given by you, therefore, are considerably higher than the prices shown to have been paid to contractors under Ex. 4?

A. Yes, sir; and that was the very object of making up Ex. 4, to show that it was necessary to add a certain amount to the prices paid contractors to arrive at the figures showing the cost of doing the work.

Q. Now, what we want to get at, Mr. Hogeland, is just what constitutes the additional amount involved in the cost of this kind of work over and above the amount paid to contractors, and you will understand that my primary object of the inquiry is to develop that fact. Now, will you kindly again state to the Court just how you got at the arbitrary—or perhaps I ought not to say arbitrary, but constant addition to the contract price which should be used in stating the total cost of this class of work?

A. As shown on Ex. 4?

Q. As shown on Ex. 4.

A. I went over that very fully on my direct examination, but I will repeat it.

Q. Well, just concisely.

A. In order to ascertain what amount should be added to average contract prices in order to cover the entire cost of grading per yard, we went back in our records and took out the lines which had been graded by contract since 1898, and prepared a statement (Ex. 4) showing what the average contract price was on each of those lines for each class of material. This would be shown in columns 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 of that exhibit, column 13 showing the average contract price for all materials, including earth, hard-pan, loose rock and solid rock; the next column (14) shows in addition to what had been paid contractors, according to their contracts,

all other charges on each of these lines against grading. That would include overhaul, transportation of grading outfits, men and supplies and all extra bills properly chargeable against grading. Among such extra bills would be ditching, moving and changing of roads, which could not be paid for by contract prices, any work of that kind which a contractor necessarily had to do to carry out the grading but which could not be measured and paid for by the yardage price. Then, taking those total charges and dividing by the total number of yards moved on each of those lines, we obtain the figures in the last column, which show the average cost per yard necessary to make the total of those charges. Now, by comparing columns 13 and 15, you can ascertain what the increased cost has been per yard for every yard of material moved on those lines to cover the entire charges against grading; and those summed up, so as to get an average for the entire 47,000,000 yards of material, shows the average contract price of 33.4 cents per yard, and the average cost per yard covering all charges 44.8 cents, which would show that it was necessary to add what I call a constant of 11.4 cents to every yard of material moved by the contractors to obtain the actual cost of such material.

Mr. O'BRIEN: Describe what column 14 is.

WITNESS: Column 14 includes the amounts paid contractors under their contracts as well as all extra charges such as I have described as overhaul, transportation of grading outfits, men and supplies, and extra bills of every nature properly chargeable against grading.

Q. You do not mean, do you, that the total charges appearing in column 14 were paid out by the Company?

A. Everything was paid out except the transportation charges, and some of those were paid out.

Q. Well, there is nothing in any of the papers which you have furnished in connection with your Ex. 2 which shows how much of this grand total consisted of charges made by the

Company for transportation furnished by it and for the rental of its equipments and other things of that kind?

A. There is nothing there for rental of equipment. It is altogether a transportation charge for grading outfits, men and supplies required for the grading.

Q. Well, now, then, the items constituting this extra expense on the line from Kelley Lake to Fermoy, in St. Louis county, are not different from the items constituting the extra expense in reference to the other roads upon which construction work was carried on as shown by Ex. 4?

A. How do you mean different?

Q. Why, they are of the same class; that whatever is included upon that line as an extra charge and which went to augment the amount given in this column headed Total Charges is of the same kind and class of service, and constitutes the same kind of charges as were made in all the other cases?

A. I don't think that would be strictly true. They are of the same kind, but necessarily each line varies as to the kind of charges there would be; for all extra items over and above what was paid contractors in accordance with their contract each line would be different in that respect.

Q. The reason why I ask the question with reference to that line is that I have before me your report to the Railroad and Warehouse Commission of the items of cost of the line from Kelly Lake to Fermoy, which specifies, somewhat in detail, what they consist of, and to which I intend to call your attention, and I wanted to know if that report was typical of the charges that enter into the so-called extra cost on all of the lines.

A. It would show some at least of the items that would appear on practically all of the lines.

Q. The correctness of the constant sum which you add to the price of moving these various classes of material depends

entirely upon the propriety of these extra charges which are included in column 15, and it seems to me, Mr. Hogeland, that we ought to have a specification of what those charges are, because you are applying to your estimate of the cost of grading the entire system that constant of 11.4 without our being able to know in any way what the basis is from which you make the deduction and from which you claim the justification for adding that constant increase.

Mr. HOLDEN: You mean, General, a specification of the name of the different items that enter into that class of charges?

Attorney General YOUNG: Yes. Now, here, up to column 14 the charges are contract prices which were not given specifically, and a mere matter of computation.

WITNESS: I thought probably if some one would come down and go over this ledger in which all these charges appear it might serve the purpose, but I can have it drawn off; it will take several days' time to do it.

Mr. HOLDEN: My understanding as to that matter is that these extra charges on this particular piece of work, Kelly Lake to Fermoy, are spread through a great many pages of ledgers. How many pages, Mr. Hogeland?

WITNESS: Well, I think, roughly, in the neighborhood of 200 pages.

Mr. HOLDEN: 200 pages of ledger entries, and for that reason the amount of work involved in taking them all off is very great. We will do anything that is reasonable and we will take them all off if time is given us, but we have suggested that if the State would send some one down to our office, where the ledgers are, they could make an inspection and could not only take off items of the amounts paid but the character of the amounts of expense, and any arrangement that may be agreeable we will be glad to fall in with.

Attorney General YOUNG: The cost of construction is very greatly augmented by the item which goes into column 15, your Honor, of Ex. 4.

The MASTER: I have been wondering—I don't know but it is in the case here—whether that constant is common to the six different materials; that is, whether it would be just the same for loose rock, just the same for hard rock, (I mean the same proportion), and just the same for No. 3, No. 2, No. 1 and No. 0.

Attorney General YOUNG: I presume the Company thought that by taking this number of concrete examples there would be a sufficient basis for deducing a rule; but we would like to have some instance that is typical, and we selected the Kelly-Lake-to-Fermoy line because we had a specific report as to that from the Company.

Mr. HOW: I don't understand that he used the constant in making his Ex. 2; the price of his grading in Ex. 2 is increased by an amount that in his judgment it would be necessary to pay for overhaul, extra bills and other charges to grading, that are not included in the contractor's price, representing the actual cost to the Company, about which the Master has heard a good deal since these hearings in the various cases started. He produces this constant merely as a justification for adding to the estimated contractor's price enough to bring it up to what he has made as to the cost of the grading.

The MASTER: Yes, I understand this Ex. 4 is confirmatory.

Mr. HOW: That is all, as I understand it, but this constant price which he has made from these averages much more than justifies him in adding what he has upon his judgment, based upon his experience in making his Exhibit 2, but he has not added any constant to any quantities in Ex. 2, Item 2.

Attorney General YOUNG: But he has said, your Honor, that the things which he had in mind in adding the increased amounts to the contract price in item 2 are the things which enter into the actual increased cost in column 15 of Ex. 4. Now, if we can get at what those are, we can tell the propriety of this addition. I am inclined to think we would like to have that

item, and I think we could send somebody down if you would have somebody work with him to get at it.

The MASTER: That would probably save the record, if you can send somebody down and get a general idea and then cross-examine in regard to it afterward.

Q. The constant which you have added, as Mr. O'Brien suggests, is 33⅓ per cent increase over the contract price on all these various items, that is, upon contract price which averaged 33.4 cents you have added 11.4 cents, which would be in round numbers 33⅓ per cent increase of the contract price because of extra expenses?

A. No, sir; as Mr. How explained, I didn't add that constant 11.4 cents.

Q. Well, you added something near it?

A. I added something to the contract prices to cover the full cost of the work after these extra items have been included, and my Ex. 4, where that constant 11.4 is found, is confirmatory of that principle.

The MASTER: That something should be added?

WITNESS: That something should be added. There is where the great question seems to arise, as to how much should be added.

By Mr. O'BRIEN:

Q. May I ask you a question, Mr. Hogeland? You ascertained the total yardage on the system in Minnesota, the total number of yards of material moved, did you?

A. Yes, sir.

Q. And you ascertained from your investigation of prices that you had paid since 1898, that the average contract price for moving material would be 33.4 cents?

A. You understand, Mr. O'Brien, as I said before, that that exhibit 4 was made up a considerable time after item 2 in Ex. 2 was prepared.

Q. What did you take to be the average contract price for moving earth?

A. The prices which I considered should be used to cover the entire cost of the work of grading are shown at the foot of item 2 in Ex. 2.

By Attorney General YOUNG:

Q. Some of these prices on Item 2, Mr. Hogeland, exceed the prices which you claim to be justified by the records as shown by Ex. 4?

A. If you will make averages of my prices on Ex. 2, Item 2, you will find that the average price for earth is 31.9 cents; the average price for all materials is 33.8 cents. You will have to do some adding and dividing to get that, but that is the truth.

The MASTER: It is not shown in that form on the exhibit?

WITNESS: It was not shown in that form. I am giving you these to show what those averages are.

Q. Of the materials including rock, do you mean?

A. Yes, sir, but that is the average price paid contractors. The average cost of the work after these extras have been added is 44.8 cents, and I have only used in Minnesota 33.8 cents for all materials; that is, if you take the sum of these amounts—

Mr. HOLDEN: Make the record clear, when you say "these."

WITNESS: If you take the sum of the amounts for grading at the foot of Item 2, Ex. 2, and divide by the total number of yards, the average is found to be 33.8 cents; comparing that with the average which I found on Ex. 4, the last column, at the foot thereof we find 44.8 cents as the average price paid for 47,000,000 yards of grading since 1898, which I think shows that I was very conservative in the average price which I used.

Q. Well, isn't it also true, Mr. Hogeland, that in the lines built in Minnesota, which you have separated from the other lines appearing on page 4, that the average price for moving of material was 23.9 cents?

A. That is the average price that—

Q. This is the average price, from experience, on No. 4;

you see you have taken the Minnesota lines on No. 4 and separated them from the other lines appearing upon that exhibit; now, the average price, from experience, in Minnesota was 23.9 cents, and you have used 33.

A. The average price paid contractors was 23.9 cents; the average price of total charges is 36.7 cents.

Q. In Minnesota?

A. Yes, sir. That you will have to obtain by picking out the Minnesota lines.

Q. The contract quantities you have here?

A. And dividing the total charges by the total yardage, which still shows that I have been conservative.

The MASTER: That is, it is 7 or 8 cents less than what Ex. 4 shows?

WITNESS: No, it is—

Q. It is 10 cents more than the average contract price as shown by Ex. 4?

A. I would like to explain to the Court that at the foot of Item 2, Ex. 2, by dividing the total charges to grading by the total yards brings an average price of 33.8 cents for all materials.

The MASTER: That is right. That was just the contract price, but not after you had added anything?

WITNESS: That is my judgment of what the grading in Minnesota would cost.

The MASTER: Well, now, that is what I want to know; that is your judgment of what the grading would cost?

WITJNESS: Yes, sir, after all items are included.

The MASTER: That is right.

WITNESS: All items are included, the total cost of grading per yard of all materials, 33.8 cents. By taking Ex. 4 and picking out the Minnesota lines we find the average cost, including all charges per yard, is 36.7 cents.

The MASTER: Oh, yes, I see.

Q. Now, the correctness of that depends upon the propriety of the extra items that are entered in column 15?

A. Yes, sir.

Q. Because the average contract price in Minnesota is 23.9 cents, while the average contract price on all of these lines was 33.4 cents?

A. Yes, sir.

Q. So that in Minnesota the average contract price was substantially 10 cents a yard less than the average contract price on all the lines taken together?

A. Yes, sir, very nearly 10 cents.

Q. So that the constant that you have added, then, or the increased amount that you have added for the lines in Minnesota, instead of being 11.4 cents per yard, would be 20 cents per yard?

A. No, sir.

Q. Would be 22 and—

A. No, sir.

Q. 10 cents a yard?

A. No, sir, you are not right yet.

Q. Well, I wish we could get it.

A. Well, I want to make it plain to you if I can.

Q. All right.

A. On Ex. 4, under the total contract quantities on Minnesota lines I show an average price paid to contractors of 23.9 cents; by picking out the Minnesota lines and the total charges for same in column 14 and dividing by the total yardage in Minnesota we get an average cost per yard of 36.7 cents; the difference between that and the 23.9 cents gives a constant of 12.8 cents, as against 11.4 constant for the system, or all lines shown on Ex. 4.

Mr. O'BRIEN: But what we are asking is this: In your actual computation as contained in Ex. 2 you have computed the material at 33.8 cents?

WITNESS: It averages 33.8 cents.

Mr. O'BRIEN: Yes, which is 9.9 cents more than the contract price for work in Minnesota as shown at the foot of Ex. 4?

WITNESS: Yes, sir.

Mr. O'BRIEN: We didn't understand each other, that was all.

WITNESS: Which shows that I was conservative.

Q. Well, it either shows that you were conservative or wrong, one way or the other. Now, we want to know whether you are right or wrong in the items which you have entered in column 15, and we would like to have the details of those items as to at least one of the lines as suggested yesterday, say of one of the lines that might be called typical, that we might know what it is that you have charged up there to increase the cost; it may be that you are entirely right and it may be that we would disagree with you, and in that case we want to submit it to the Court.

A. It is possible that I could pick out a line which would be simpler than the Kelly Lake to Fermoy, so far as the charges are concerned, but otherwise I think we ought to go through the books.

Q. If we furnish a man to go through the books, Mr. Hogeland, may he have access to the records with reference to all of these four lines in Minnesota that enter into Ex. 4?

A. Yes, sir, I don't think there is any reason why that can't be done.

Mr. HOLDEN: Absolutely any record that we have bearing on this subject is open at any time.

Mr. O'BRIEN: We think that would be more satisfactory and probably save a great deal of time.

The MASTER: We will leave it that way, and Mr. Hogeland can be recalled if you desire, after that examination has been made.

Q. Now, in Item 11 you have applied to all the bridges, trestles and culverts, you stated, last year's prices; that is, prices as of June 30, 1908?

A. Yes, sir, the prices prevailing in 1908.

Q. Upon Section 44 appears the stone-arch bridge at Minneapolis; what did those figures $867,000 mean immediately under the words "stone-arch bridge" on that exhibit?

A. That means the cost of reproduction of the stone-arch bridge.

Q. When was that bridge built?

A. From 1880 to about 1882.

Q. Does that bridge belong to the Great Northern road?

A. Yes, sir, the Minneapolis Union is a part of the Great Northern.

Q. Have they taken over the Minneapolis Union Railway?

A. Yes, sir.

Q. The property of it?

A. Yes, sir, that is my understanding.

Q. Or do they simply own stock in it?

A. My understanding is that it is completely owned and is a part of the Great Northern system; in any event, we were advised by our legal department to show it that way.

Q. What does that Union railway include, do you know?

A. It includes the line branching from the orignal main line at what is known as University switch, a short distance beyond St. Anthony Park, crossing the Mississippi river and connecting again with the original main line near First street north, Minneapolis.

Q. Near First street north, and includes the Union station?

A. Includes the Union station and the double tracks, stone-arch bridge, and the main and sidetracks within the limits that I have mentioned.

Q. Well, isn't that an independent corporation? Hasn't it an independent existence outside of the Great Northern Railway?

A. I can't tell you as to that.

Q. Do you know what that bridge cost?

A. It cost about $650,000.

Q. Your estimate of the cost of reproduction is $867,000?

A. Yes, sir.

Q. Does Section 44 of your road simply comprise the road of the Minneapolis Union Railway?

A. Yes, sir.

Q. And the total value given in Item 11 of Ex. 2 is $1,189,144, includes only the bridges, trestles and culverts on that line?

A. Yes, sir, the $1,189,144 shown in the column of total value opposite Section 44 on Item 11, Ex. 2, represents the cost of reproduction of the bridges, trestles and culverts on the Minneapolis Union.

Q. The value of the Union station at Minneapolis, then, would appear in this exhibit under the head of what,—buildings?

A. Under Item 17, Station Buildings and Fixtures.

Q. That is, the item $342,500?

A. Yes, sir.

Q. Is that what that station building cost?

A. I do not know what that did cost.

Q. It cost less than the figure shown here, did it not?

A. I couldn't say as to that.

Q. You are not able to say, I understood you, whether the physical properties of the Union Railway Company have been transferred to the Great Northern or not?

Mr. HOW: They have, as a matter of fact.

Attorney General YOUNG: They have in this last consolidation, have they?

Mr. HOW: Yes.

Attorney General YOUNG: Well, that was what I supposed, that was my own understanding.

Mr. HOW: That is my advice, that they have been transferred. They are under your jurisdiction as engineer of the Great Northern, are they not, Mr. Hogeland?

WITNESS: Yes, sir.

Attorney General YOUNG: That would be since last summer when they were taken over, or have they always been under your jurisdiction?

WITNESS: They have always been under my jurisdiction since I have been chief engineer of the Great Northern.

Q. There has no change taken place that you know of with reference to your jurisdiction over them during the last year?

A. No, sir.

Mr. HOLDEN: My understanding is that Mr. How's statement is correct.

Mr. HOW: There has been a conveyance of the property, I am informed.

Attorney General YOUNG: I know of several of them. I didn't know whether those were included or not.

The MASTER: I notice on Item 17 you have passenger accommodation depot at Hamline; is there any depot there now?

WITNESS: Yes, sir.

The MASTER: Is it in use?

WITNESS: Not in use, no, sir.

The MASTER: It hasn't been for twenty-five years, has it?

WITNESS: Oh, more recent than that, it seems to me.

The MASTER: It is a good long while, for I have been by it a great many times twice a day.

WITNESS: It hasn't been in use for a number of years.

Q. In your estimate of the cost of reproduction of station buildings and fixtures as shown on Item 17, have you made any allowance for depreciation?

A. No, sir.

Q. You have treated all existing buildings as though they were new and have applied to the plans and specifications for

those buildings the prices as of June 30, 1908?

A. Yes, sir, the prices prevailing during 1908.

Q. As a matter of fact, many of these buildings are of considerable age, are they not?

A. Yes, sir, some of them were built a number of years ago.

Q. And there should be something allowed for depreciation, should there not?

A. Not in an estimate of the cost of reproduction.

Q. Well, as I understand it, you are trying to reproduce a road that would be a duplicate of the road as it stands today, are you not?

A. Yes, sir.

Q. Well, entirely new buildings erected last year to take the place of buildings that are in a state of decay, to some extent at least, would not be a literal reproduction, would it?

A. I consider these buildings just as valuable for railroad purposes as though they were new buildings, and have not considered that any depreciation should be applied in making an estimate of the cost of reproduction.

Q. If the buildings were placed upon the market, there would have to be some depreciation allowed, would there not?

A. Not for railroad purposes.

Q. Well, doesn't the principle of decay apply to railroad buildings the same as others? Doesn't age tend to depreciate the value?

A. It is necessary to keep up railroad buildings in practically as good a state of—good a condition as they were when originally built.

Q. Yes, that is true, but is that possible inasmuch as the material out of which they are constructed is perishable?

A. Undoubtedly some of the materials deteriorate, but for railroad purposes they are just as good as a new building, just as valuable.

Q. Well, they wouldn't last quite so long, would they?

A. With the continual repairs that are made to them, they as a rule last indefinitely.

Q. When you testified in the Spokane rate case didn't you make an allowance for depreciation of structures of this kind?

A. No, sir.

Q. Did other engineers who testified in that case testify that some allowance for depreciation should be made?

A. I am not positive as to that.

Q. Well, you do know, do you not, that old structures never sell for as much as new ones; that is, I am speaking now about buildings.

A. Oh, that is undoubtedly true.

Q. And fixtures of that character. I notice you have a reference here to the line between Wylie and St. Hilaire, that is Section 27, and that calls my attention to the fact that you stated in your general testimony, I believe, (in your direct testimony) that you had counted in as a part of the system all road that had been constructed by the company or for it in the state even though some of it was afterwards abandoned, did you not?

A. No, sir; no, sir, I didn't say that. I said there was included in my statement of grading some pieces of line that had been abandoned; I didn't say that all lines abandoned had been included.

Q. Did you include the line from Shirley to Wylie?

A. No, sir.

Q. That portion of the line has been abandoned and nothing put in its place? The track has been taken up?

A. That has been entirely cut out from both the mileage and from the statement of the cost.

Q. Speaking about depreciation, it is true that you have allowed no depreciation with reference to any of the structures constituting any part of the railway system, is it not?

A. Yes, sir, that is true.

Q. And while I am on that subject, that would also apply to your estimated cost of reproduction of equipment?

A. Yes, sir.

Q. Nothing has been taken out for depreciation?

A. No, sir.

Q. You have on Item 25 a list of interlocking plants and their values; did the Great Northern road pay for these interlocking plants in full?

A. All that are shown on the Item 25 were paid for by the Great Northern.

Q. What is the rule with reference to interlocking plants as to which company pays for them?

A. The junior company, usually.

Q. That is the company which makes it necessary to have the plant put in?

A. That is usually the case.

Q. And these are the instances where your company was the junior company and paid the cost according to your records, are they?

A. Yes, sir, that applies to most of them.

Q. On Item 27 you have enumerated the telegraph lines and appurtenances on the various sections into which you divide the road; does the Great Northern Company own all these telegraph lines and appurtenances?

A. That is my understanding, but as I explained in my direct examination, this Item 27 was compiled by the superintendent of telegraph.

Q. You don't want to testify as to whether the company owns these lines or not, eh?

A. No, sir; I think the superintendent of telegraph would be more competent to testify as to that. It is my understanding that only the lines that the Great Northern own are so listed.

Q. Now, I want to call your attention to Item 36, being the

freight on construction material. This item consists of the transportation that you have assumed would be necessary in the process of reconstruction according to your plan as outlined on map Ex. 1, is it not?

A. Yes, sir, from eastern terminals, for rail and track fastenings, and from Cloquet as a rule for ties to the material yard, it would be for each section.

Q. The matter is purely speculative and would apply only to the plan which you have outlined on Ex. 1, the map?

A. It is made to apply to that scheme of reproduction of the lines, and I believe is as economical an arrangement for trasportation charges as can be worked out.

Q. If we could be set down in that imaginary realm that you have conjured up. Now, Mr. Hogeland, what are these rates of transportation which you have used for ties, for instance? Are those regular tariff rates?

A. Yes, sir, they are the rates applicable to ties and rails and track fastenings as they now exist.

Q. They represent not the cost to the company but the cost at which as a commercial carrier the railroad is now carrying that class of merchandise?

A. In this particular case I consider that that comes as near representing the cost of the service as anything we could use.

Q. Well, is it your opinion that all of the tariffs of the company are so low that it only produces the cost of the work, or isn't the company making a profit on its business?

A. I explained that matter this morning,—that the transportation that would be necessary in a case of reproduction and which is covered by this Item 36, would be done on lines that were not operated lines and all the conditions would be adverse, therefore transportation could not be conducted on the same basis that it could be on operated lines.

Q. This is transportation that you would have carried on

before the road would be used for other purposes?

A. Yes, sir; represents the moving of trains over a roadbed which is not fully settled, track that is largely skeleton, not ballasted, and train-loads which necessarily are comparatively small and generally an empty movement in one direction.

Q. And the rates for transportation are allowed during the period when the capital which is theoretically necessary for the building of the road would be also drawing interest; isn't that true, according to your scheme?

A. Yes, sir, that is true so far as the capital had been invested up to that time.

Q. And these charges are allowed irrespective of the fact that under your plan you are allowing as a part of the cost interest on the capital?

A. I don't see that that has any bearing on the thing. It is a necessary part of the cost of carrying out the reproduction.

Q. I just want to get your views of it. The total cost of freight on construction material, according to this estimate Item 36, would be $1,700,043?

A. Yes, sir.

Q. And that, in your opinion, should be added to the cost of reproducing the road?

A. Yes, I consider that a necessary part of the cost of reproduction.

Q. On Item 38 you specify the interest which in your opinion would be earned on the idle capital while the road was under construction, which in gross would amount to $27,611,471?

A. Yes, sir.

Q. That would be $10,000 a mile, for main and sidetrack in the state?

A. Yes, sir, a little less than that.

Q. We want to examine you again, Mr. Hogeland, when we

get this information that we have asked for, and I just want to ask you in a general way whether this estimate that you have now placed before us of the cost of reproducing this road actually represents either the cost of the road or its present value.

A. No, sir, not necessarily either.

An adjournment was here taken until Monday morning, at 10 o'clock, March 22, 1909.

Federal Building, St. Paul, Minn., Monday, March 22, 1909.

The hearing was resumed at 10 o'clock A. M. pursuant to adjournment.

CHARLES HAYDEN,

sworn on ehalf of complainants, testified:

By Mr. HOLDEN:

Q. Your name is Charles Hayden?

A. Yes, sir.

Q. What is your connection with the Great Northern Railway Company, Mr. Hayden?

A. At the present time I am Assistant Right-of-Way Commissioner.

Q. How long have you been connected with that company or its predecessor company?

A. I entered the service of the Manitoba Company (the St. Paul Minneapolis & Manitoba Railway Company) in May, 1887. I have been there ever since with the exception of the year 1890, when I was in California on railroad surveys, returning to the company in 1891.

Q. What different positions have you held in the right-of-way department?

A. I started in as Chief Clerk, and later was Assistant Right-of-way and Tax Commissioner, and on the first of January, 1903, was made Right-of-way and Tax Commissioner,

which position I held until December 31, 1906; since that time I have been Assistant Right-of-way Commissioner.

Q. Before you entered the service of the Great Northern road, had you had any experience in either railroad construction or surveying work?

A. Yes, sir; I was with the Pennsylvaina Railroad, as Assistant Right-of-way Engineer, for seven years before coming to the Manitoba; I was also on railroad surveys and construction with the Union Pacific and with a railroad in South America, in Brazil.

Q. Well, then, covering all of the work that you have referred to, over how many years' time does that extend?

A. About thirty-two years.

Q. Now, dealing with your experience with the properties of the Great Northern Company, what has your work been?

A. I have had to do with the purchase of right-of-way, either directly or through agents in the field, and also the keeping of records, and platting up of deeds, everything that goes into the right-of-way department of a railroad.

Q. To what extent have you been personally over the lines of the Great Northern Company, both in Minnesota and outside of this state?

A. I have been over practically all of the lines of the Company in this state, and on the entire system, some of them many times.

Q. Well, has it been a part of your work to familiarize yourself with right-of-way values both in the country and in the towns and villages and cities through which this company has lines?

A. Yes, sir.

Q. Has it been a part of your work to take up and carry on and conclude actual negotiations and purchases of right-of-way both in the country and in the towns and cities?

A. Yes, sir.

Q. And has that class of work extended over a number of years,—in fact, has it extended throughout your experience with this company?

A. Yes, sir.

Q. Can you state, approximately, in acreage, or some such term, the amount of land that you had direct connection with in purchasing for this company?

A. I have not had any statement made of that, but there have been about 5,000 miles of road, either built or purchased by the company since I entered its service in 1887, and approximately, I should say, 100,000 acres of right-of-way obtained.

Q. Does that acreage include not only country right-of-way, but right-of-way in towns and cities?

A. Yes, sir.

Q. And purchases have been made by the acre or fraction thereof, in the country and in the towns and in the cities, by the platted lot or subdivision which appears within the limits of the city or town, have they?

A. Yes, sir.

Q. Could you state some approximate figure of the amount of money involved in the purchases that you have had direct connection with?

A. It would be pretty hard to give the exact amount, but it is in round figures between eight and ten million dollars, I should say.

Q. A schedule has been prepared, has it not, showing the right-of-way values of the Great Northern system, and also including the lands in the state of Minnesota for use in this case?

A. Yes, sir.

Q. How long have you been engaged in considering the cost of reproducing the lands of the Great Northern Company? I don't mean generally, in the way in which your general experience would have covered, but for particular purposes.

A. Well the first systematic inquiry as to valuation was

begun in 1906, when we were asked to make a report to the State Railroad and Warehouse Commission of Minnesota as to the value of our right-of-way and terminals in the state. We undertook to do that by using the men as we could from their other work and giving it such attention as we could from our other work until the spring of 1907, when we were asked to make a valuation for the Spokane Rate Case.

Q. Of the whole system?

A. Of the entire system, including Minnesota. This had to be done in rather a hurried manner in order to get the information in time for the Portland hearing, in April, 1907. We made up a valuation and submitted it at the Portland hearing, testifying to it, and when we made the report to the Railroad and Warehouse Commission of Minnesota we used the same figures for Minnesota that we had used for the Spokane Rate Case.

Q. Now, then, for the present hearing, what use have you made of your previous figures?

A. I have revised them somewhat, at least that portion of the figures outside of the terminals in St. Paul, Minneapolis and Duluth, in the state of Minnesota.

Q. To what extent, during the last three years, have you given personal attention to the matter of ascertaining the values on these lands?

A. I have given considerable personal experience and attention to it.

Q. Have you gone along on to the lines for the purpose of making investigations at different points, and ascertaining the opinions of credible persons, pursuing your inquiries along those lines?

A. Yes, sir.

Q. Down to what date have you prepared your figures?

A. I have prepared the figures down to the date of June 30, 1908.

Q. In the report made to the Minnesota Commission, were there some errors in computations of areas and valuations that have since been corrected?

A. Yes, sir; when we put in our report to the state, the state engineer, Mr. Morgan, began to check up the items which we had returned and the acreages and the valuations, and in doing so he discovered a number of errors in computations and extensions, and also in acreage and from time to time he reported the differences to our office, and eventually sent a man to the office who checked up our rights-of-way maps, with the result that we have come to an agreement as to acreage in Minnesota, with the exception, I believe, of certain street crossings, where the streets have not been vacated, which I do not believe he has allowed for, and which I included in my estimate; but I believe we practically agree on the acreage at this time.

Q. You have added additional areas acquired since June 30, 1906, so as now to include all the areas up to and including June 30, 1908?

A. Yes, sir.

Q. In order to arrive at this valuation what basis did you proceed upon?

A. In valuing the right-of-way through the country districts I first sent out to the station agents and others along the line of our road at different stations letters asking them to ascertain and advise me the average value of farm lands, both improved and unimproved, and the value of town lots without improvements, and, from that information obtained, I compiled a map showing between stations the various prices per acre, and at stations the prices per lot, and used that in making up my valuations; but, at the same time, I used my own judgment, based upon my experience in securing right-of-way, as to what in my estimation right-of-way would cost through certain districts of the state and on the System.

Q. Did you, and have you now, personal knowledge of practically all the lines in the state of Minnesota?

A. Yes, sir.

Q. And has that been derived from personal visits and trips over the line?

A. Yes, sir.

Q. And were you able, on receiving these reports, to exercise any personal knowledge of the lands referred to in the report, to determine whether or not it met your own judgment?

A. Yes, sir; in some cases I differed, and in some I agreed with the reports I received.

Q. Outside of these reports from agents that you speak of, have you had any advices or opinions from other parties out in the state?

A. Yes, sir, I have.

Q. What kind of people were those?

A. Well, they were people who I considered would be able to give me fair prices on all manner of lands and lots, people who were in the business, bankers, real estate men, farmers—people who would know the values.

Q. Well, now, after gathering all this information together, did you afterwards go out again along the lines in this state for the purpose of reinspecting the properties?

A. Yes, sir; since the first of the year I have been out once or twice over the lines, and have stopped at some of the more important stations, and personally went over the ground and interviewed people at those towns.

Q. Summing all this up together, what has been the basis that you have used in fixing the price on a piece of land?

A. In the country right-of-way we have used a figure about three times the market value.

Q. I was not referring to the percentage over and above market value, but, generally speaking, to the basis; has it been what it would cost the railroad company to acquire the ground in question?

A. Yes, sir; what in my judgment it would cost them to buy the right-of-way, if we had to reproduce it as of that date, June 30, 1908.

Q. And that has been the basic principle upon which you have worked?

A. Yes, sir.

Q. Now the testimony you have given about conditions in relation to your knowledge and your inquiries in the state of Minnesota, does that apply in general to values in other states outside of this state?

A. Yes, sir.

Q. And that, in general, is the method you adopted in each of the states for ascertaining the cost of reproducing these lands which are now owned by the company?

A. Yes, sir.

Q. Now, the values in the cities of St. Paul, Minneapolis and Duluth, how were they arrived at?

A. In those cities we had a consultation with the various railroads in the state, and their right-of-way men, and we concluded to employ real estate men in the three larger cities, St. Paul, Minneapolis and Duluth.

Q. That consultation occurred about when?

A. That was in September, I think, of 1906; about that time.

Q. And for what purpose was that meeting called?

A. It was to consider the blanks which had been sent to us by the Minnesota Railroad and Warehouse Commission for the purpose of making a report of our valuation to that commission.

Q. And following upon that meeting, what plan was arrived at?

A. Do you mean as to the cities?

Q. Yes, as to the cities.

A. We agreed to employ these real estate men, the best

ones we could find in each of the cities, three in each city, and have them make a valuation of the real estate of our various companies in each city.

Q. That was done, was it not?

A. It was.

Q. And a report made to you of the values thus placed upon the Great Northern terminal properties in these three larger cities?

A. Yes, sir.

Q. That report—what did you do with it, what use did you make of it?

A. I took the figures furnished by the real estate men in the three cities and made no change in those figures except to add to them a percentage for the railroad value; the figures which they furnished as we asked them to were the value of the property as real estate, without improvements.

Q. Well, did you give that report personal consideration in the light of your own knowledge and judgment?

A. Yes, sir.

Q. Well, then, if I understand you, you made the valuation assisted by the opinion of others which you procured of the lands and right-of-way grounds outside of the three larger terminals of St. Paul, Minneapolis and Duluth?

A. Yes, sir.

Q. Will you state the basis upon which these real estate experts or this committee proceeded in valuing these lands in the terminals?

Attorney General YOUNG: I presume that means what their instructions were. He was not a member, I suppose, and didn't know.

Mr. HOLDEN: I suppose he knows what they did; he found out before he got through, I think.

A. I can only say that our instructions to them were to value the property as real estate and not as railroad property,

but based upon the valuations of adjoining property through which the right-of-way ran, and to use their own judgment as to valuations, to make it fair; we did not want them to make a high valuation or a low valuation, but what in their own judgment as real estate men, from the experience they had had, would be a fair valuation for the company's property; and I understand that is what they did.

Q. Did they put their figures by the city lot or by per square foot, or on what basis?

A. We furnished them maps of each city, showing the right-of-way of our company through the same, and when we got their report they had sub-divided the city into sections, between streets; for instance, starting in St. Paul at Sibley or Broadway, and running to some other street, in which they placed a valuation in that district on our right-of-way at so much per square foot; they did the same in other cities, and did not attempt to make a total valuation in figures (dollars and cents) of our entire property.

Q. Now, in placing your figures upon the country right-of-way and terminal grounds in cities, towns and villages, other than the three mentioned, how did you proceed?

A. I took the best information I could get as to value of town lots along our station grounds, the unimproved lots, the lots without buildings, and where the ground was platted adjacent to the right-of-way and station grounds, I divided the station grounds up into so many town lots, or equivalent to so many town lots, and used that as a basis for arriving at the valuation; I also added a percentage to that for the value of improvements, and for any severance damage there might be, if any.

Q. What do you mean by severance damage?

A. Where we ran through a city which had already been platted before our road was constructed, we sometimes ran through diagonally and took parts of the lots, did not take

the whole lot, so that there was a portion of the lot remaining after we had taken what we required for railroad purposes, and we had to pay for that severance; in many cases we paid almost as much, if not as much, as the entire lot would be worth.

Q. In placing figures upon the right-of-way between stations in the country?

A. In making the valuation of right-of-way between stations, I used principally my own judgment as to the value, what I thought it would cost to obtain such right-of-way, and in order to arrive at a market value, which was asked for in the State's returns, I divided that right-of-way by three, and before making the return I compared that amount with the amounts received from agents and others as to the land values to see whether or not it corresponded. In some cases it did, and in some cases it did not; but I think, as a rule, it corresponds reasonably close.

Q. You spoke, a while ago, of a multiple of three in making figures for country lands and lands in smaller cities and towns; just explain what your conception of that proposition is and why you used a factor of that kind.

A. Well, in securing right-of-way, where we run through farms and cut farms up and destroy buildings or interfere with improvements, we have to pay more than the first cost of the land. If farm land is worth $25 an acre, we figure we would have to pay from two to four times (even more in some cases) than what the land is actually worth, to get our right-of-way; and for the purpose of making up the report to the state, we had a consultation with the right-of-way men of the various railroads in the state to see what percentage we would use; there were no two persons, hardly, that had the same idea of that percentage, because it varies so much in different parts of the country under certain conditions, so that it is very hard to make an absolute factor that will apply to all parts of a

system or of a state; but, after considerable discussion, we concluded that about three times would be reasonably fair for that purpose and adopted that in our case.

Q. Now, in view of the experience which you have personally had, to what extent is that factor supported by your experience?

A. Well, I think, as a rule, it is probably a fair factor to use in a considerable body of right-of-way such as this has been. It would have to be varied in individual cases very considerably.

Q. When you say "varied" what do you mean?

A. Well, in a country where we are building a new line, where the country is not developed, settlement hasn't any more than just started, we don't have to pay as much in that sort of country in addition to the land values as we do where it is more thickly settled up.

Q. Well, has your experience shown that you have had to pay more than this factor?

A. Yes, we have paid more in many cases.

Q. And at times you have paid less?

A. At times we have paid less than three times, yes, sir.

Q. Now, what method did you adopt in handling this matter in the larger terminals, to arrive at what you referred to a while ago as the railroad value?

A. You mean in the three larger cities of Minnesota?

Q. Yes.

A. In St. Paul and Minneapolis I added twenty-five per cent to the real estate men's figures for the value of improvements which would have to be destroyed or removed, which they did not estimate in their figures, and for any severance damage for the cost of procuring the right-of-way, salaries and expenses of field-agents, examination of titles, etc.

Q. And in Duluth?

A. In Duluth I didn't use any uniform percentage. On

Rice's Point I used a factor of three times the real estate men's value per acre; and on the Michigan street property I used a varying factor; on the dock property I added $25,000 to their figures.

Q. I show you an exhibit which has been marked Complainant's Ex. 9—Hayden. Will you state just what that exhibit is; taking up the first page, for instance, what does that comprise?

A. The first page of the exhibit is a general summary of right-of-way, station grounds and terminals on lines in operation; the statement starts out with the location, that is, the state or province in which the right-of-way and terminals are located; the second column has the number of miles; the third column has the value of right-of-way and station grounds outside of terminals; the fourth column has the value of the terminals alone, and the last column has the total value including both terminals and right-of-way and station grounds.

Q. This page embraces the entire system?

A. Yes, sir.

Q. Now, will you read into the record the figures for the state of Minnesota?

A. Minnesota, 2 056.07 miles; right-of-way and station grounds outside of terminals, $7,100,379; value of terminals, $23,535,542; total value, $30,635,921.

Q. Now, then, will you read into the record the totals for the entire system?

A. Total 6,760.66 miles; right-of-way and station grounds outside of terminals, $25,089,485; value of terminals, $62,736,259; total value, $87,825,744.

Q. Now, page 2 of this exhibit state briefly what is comprised on that page.

A. On sheet No. 2, which is the sheet showing the terminals on lines in operation, the first column shows the location of the terminals; the second column the number of acres in each; the

third column the average value per acre; and the fourth column the total value of each terminal.

Q. You seem to have selected a number of cities; how many are there?

A. Seventeen.

Q. Are those the seventeen largest cities on the lines of the Great Northern?

A. I believe they are.

Q. Now, will you state the number of acres in the St. Paul terminals?

A. 354.12 acres.

Q. And an average value per acre of what?

A. $22,709.

Q. Making a total for the St. Paul terminals—

A. $8,041,686.

Q. The acreage in Minneapolis is how much?

A. 401.59.

Q. The average value in Minneapolis?

A. $36,168.

Q. And the total value?

A. $14,524,704.

Q. The acres in Duluth?

A. 27.19 acres.

Q. The average value?

A. $35,644.

Q. And the total?

A. $969,152.

Q. I notice you have below the table you have just been speaking about an item of terminals on lines under construction, and also an item of the interest of the Great Northern Railway Company in other terminal companies; referring to the items in the state of Minnesota, I notice the Minnesota Transfer Railway Company; the interest of the Great Northern in that company is one-tenth, is it?

A. One-tenth interest, yes, sir.

Q. And one-ninth in the St. Paul Union Depot Company?

A. One-ninth in the St. Paul Union Depot Company.

Q. What is the Lake Superior Terminal & Transfer Railway Company?

A. That is a switching line at the head of the Lakes in the city of Superior.

Q. Its property is not in the state of Minnesota?

A. No, sir.

Q. The interest of the Great Northern Company in that, however, is one-third?

A. One-third, yes, sir.

Q. Passing on to the third sheet, state what that embraces.

A. The third sheet is a recapitulation of right-of-way and station grounds on lines in operation exclusive of terminals shown on preceding sheet No. 2, but including right-of-way and station grounds in 370 cities, towns and villages of over 200 inhbitants each. The statement is made up by columns; the first is the location, that is, the state or province in which the right-of-way is located; the second is the number of miles; the third column is the average rate per mile; the fourth column is the number of acres; the fifth column is the average rate per acre, and the last column is the total amount in each state.

Q. Now, do I understand this page to show the total figures on the lands and in 370 villages, towns and cities, and includes everything except the terminals in the seventeen cities shown on the preceding page?

A. Yes, sir.

Q. Will you read the figures for the state of Minnesota in this recapitulation?

A. Minnesota, 2,029.44 miles; average rate per mile $3,498; acres, 35,273.42; average rate per acre, $201; total amount, $7,100,379.

Q. Turning to the next sheet and the sheet following that, the right-of-way in the state of Minnesota seems to be divided into 46 sections; state what those sections are.

A. They are arbitrary districts, agreed upon between the state engineer and our own engineers as to the sections into which they would divide the state for the purpose of making this valuation.

Q. Well, are these the same 46 sections that are shown on the map marked Ex. 5—Hogeland?

A. Yes, sir.

Q. What do these two sheets which are marked pages 4 and 5 show as to each of these sections?

A. It shows the districts, the limits of the sections, and the number of acres in each section, the average value per acre, and the total amount in dollars of the section.

Q. The first three sections do not appear on this list?

A. The sections are not continuous, from the fact that they use No. 1 for St. Paul, No. 2 and 3 and 44 and 45 for Minneapolis, and 34 and 43, I believe, for Duluth.

Q. The terminals in the three large cities are not included in these two pages?

A. No, sir, except in a general way.

Q. Except at the foot of the second of these two pages?

A. Yes.

Mr. HOLDEN: We offer in evidence Complainant's Ex. 9—Hayden.

Q. Now, have you any further exhibits showing, in greater detail, the values you placed upon the lands in the state of Minnesota?

A. Yes, sir.

Q. Will you produce what you have, please?

Witness produces statement marked Complainant's Ex. 10—Hayden.

Q. This exhibit has been marked 10—Hayden. Will you

briefly state what this exhibit shows?

A. The first sheet is a summary or index sheet, showing the various sections and their limits, the number of acres, the average value per acre, and the total amount, the total number of acres being 35,273.42; the average value per acre, $201.29; and the total amount $7,100,379; and there is a statement on this page that the above figures include station grounds and yards at all stations except St. Paul, Minneapolis and Duluth. There is a statement also by section numbers of St. Paul, Minneapolis and Duluth terminals; with the acreage, average value per acre and the total amount, making a total in the state of $30,635,921.

Q. What is the total of the terminals in St. Paul, Minneapolis and Duluth?

A. $23,535,542.

Q. And the total outside of those three terminals is what?

A. $7,100,379.

Q. The second page is a more detailed statement of what?

A. The second page is a detailed statement of the section of St. Paul, Section No. 1, giving the sections by streets.

Q. When you say by streets, you mean the boundaries of the sections by street lines?

A. Well, starting at one street crossing and running to another street crossing in the city.

Q. Those figures, are those the figures that you were referring to in your testimony a while ago which were returned by this committee of real estate men and to which you added a factor to show the railway values?

A. This is the result of their figures; they gave us the square foot valuation, and I worked out the areas and the extensions on that basis; and this sheet shows the result in dollars and cents and acreage of that computation, making a total value, based on their figures only, of $6,433,347; to which I added 25 per cent for railroad value, amounting to $1,608,339, making the total, as I stated before, $8,041,686.

Q. The next page, marked 2, Minneapolis, East Side, and following upon that page, marked 3, Minneapolis, West Side, state, briefly, what those two pages refer to.

A. Sheets 2 and 3, Minneapolis East Side and Minneapolis West Side, relate to the property which was owned by the Great Northern Railway Company on the east side of the river in Minneapolis, in the case of sheet No. 2, and on the west side of the Mississippi river in Minneapolis in sheet No. 3. That also has the same sub-divisions by sections of the city, made by the real estate men, and the price they put upon the right-of-way in each section per square foot, with the areas and the extensions carried out by myself.

Q. And the same reference to sheet marked No. 3 as being on the west side of Minneapoils?

A. Yes, sir.

Q. The figures are made up in the same way?

A. Yes, sir.

Q. Sheet marked 44, which follows sheet 3, is entitled Minneapolis Union Railway. What does that embrace?

A. That embraces the right-of-way and terminals of the Minneapolis Union Railway Company at that time, and the figures of the real estate men as to the square foot values, and the acreage and extensions worked out by myself, with the 25 per cent railroad value added.

Q. What property is embraced on that sheet?

A. That takes in the portion of the right-of-way on the east side of the river from the stone-arch bridge around to near the western limits of the city of Minneapolis, and the stone-arch bridge and the Union Depot property, at the foot of Hennepin avenue.

Q. This is as of June 30, 1908?

A. Yes, sir.

Q. Since that time has there been any change in the title of that property?

A. That has been conveyed to the Great Northern Railway Company.

Q. And prior to that conveyance are you advised as to the ownership of the stock in that company?

A. No, sir, I can't say that I am.

Q. But at the present time you are advised, as you state, that the property embraced on this page has been conveyed by deed to the Great Northern Railway Company?

A. Yes, sir.

Q. The next sheet, marked 45, Minneapolis Western Railway, embraces similar property in the city of Minneapolis. When I say similar I mean other property in the city of Minneapolis standing in the name of the Minneapolis Western Railway Company.

A. Yes, sir.

Q. What property does that embrace?

A. That is a switching road that connects with the Great Northern on the east side of the river, below the stone-arch bridge and crosses the river and runs along the west side of the river to the large flouring mills. It is a switching line.

Q. Do you know as to the ownership of that line?

A. That I believe still stands in the name of the Minneapolis Western Railway Company.

Q. Well, are you advised of the relation between that company and the Great Northern Company?

A. I understand that the stock is owned by the Great Northern Railway Company.

Q. That land was valued by these real estate men as a part of the terminals in that city?

A. Yes, sir.

Q. The next page is marked Duluth, 34 and 43; state what that covers.

A. Sections 34 and 43 are the Duluth sections; that covers the property of the Great Northern and the Duluth Terminal

Railway in the city of Duluth, and extends from the end of the Northern Pacific bridge on Rice's Point to the union depot in the city of Duluth.

Q. What is the Duluth Terminal Railway?

A. The Duluth Terminal Railway is a switching railroad, and the stock is owned by the Great Northern Railway Company, I believe.

Q. Well, is the property of that Terminal Company a part of the terminals of the Great Northern Railway Company in Duluth?

A. Yes, sir, it is.

Q. The figures shown on that page were arrived at in the manner you have already described?

A. Yes, sir.

Q. I note that the next three pages are marked section 4, sheet 1, sheet 2, and sheet 3; will you state what those three sheets embrace?

A. The three sheets marked section 4, sheets 1, 2 and 3, embrace the section from Cedar Lake yards to Breckenridge.

Q. Will you indicate on this map, Hogeland's Ex. 5, just where that section is?

A. That is section 4, starting at Minneapolis (Cedar Lake) and running out through Willmar and Benson and Morris, up to Breckenridge.

Q. Now, then, will you describe just how the figures are shown as between the country right-of-way and the terminals or rights-of-way in the towns and villages?

A. The sheets upon which this appraisal is made are similar to those furnished by the Railroad and Warehouse Commission of Minnesota and provide as follows: The first column is the location; the second column is the name of the county in which the land occurs; then there are five columns showing a width of right-of-way, each column a certain width, and in each column the number of miles and fractions of that par-

ticular width of right-of-way are shown; the next column is the total acres of right-of-way in that sub-division of the section; the next column is the average market value per acre of the right-of-way, and the next column is the average right-of-way value per acre. That is carried out to the last column for the total right-of-way value. Then follows a sub-division for the lands for yards and terminals, with the first column for location, the second column for the total acreage at each station, another column for the average market value per acre, another column for the average value for railroad purposes per acre, and, carried into the last column, is the total valuation.

Q. So that there is a segregation between the right-of-way between the towns and the right-of-way in the towns?

A. Yes, sir.

Q. And these three sheets cover the line as stated and embraced in section 4 of the map, beginning at Cedar Lake and running to Breckenridge?

A. Yes, sir.

Q. Have you in a similar way shown figures for right-of-way and city and town values for each of the other sections shown on the map?

A. Yes, sir.

Q. And does this Ex. 10—Hayden embrace all the lands within the state of Minnesota owned by the Great Northern Railway Company?

A. Yes, sir.

Q. Will you state your opinion and judgment as to the completeness and accuracy of the figures shown in this exhibit, both as to acreage and as to value?

A. I believe them to be correct, and to fairly show the value of the property in the state of Minnesota.

Q. And by "value" will you state just what you mean?

A. By "value" I would mean what I would estimate it would cost to reproduce the property as of June 30, 1908.

Mr. HOLDEN: We offer in evidence Ex. 10—Hayden.

Q. Will you state your opinion as to the accuracy of Ex. 9—Hayden?

A. I believe that statement is correct, both as to acreage and as to valuations, to the best of my judgment.

Q. Calling your attention to the interest of the Great Northern Railway Company in the St. Paul Union Depot property, will you state what, if any, special interest in addition to its one-ninth interest the Great Northern Company has in that property?

A. The Great Northern Railway Company, in addition to its one-ninth interest in all the property of the Union Depot Company, reserves to itself the exclusive use of the three most northerly tracks under the train-shed at the union depot, with the platforms which go with those tracks, and to that extent it has a greater interest than the other companies have in that particular tract of land.

Q. You say "reserves to itself," in what form was that reservation made?

A. It was made, I believe, in the deed from the Railway Company to the Union Depot Company.

Q. The deed which conveyed the property or ground upon which the union depot structure and tracks stand?

A. Yes, sir.

Q. And for what period of time was that reservation made?

A. As I understand it that was for all time.

Q. Perpetual reservation?

A. Yes, sir.

Q. That deed is of record in this county?

A. Yes, sir.

Q. Can you state the area in square feet embraced within the terms of that reservation?

A. The total area?

Q. Yes; or divided, if you have it divided into two areas.

A. I have it divided into two areas, because each area gives a different valuation per square foot. I can give you it either way. Between the east end of the passenger station and the center of Broadway, 44,790 square feet; and between the center of Broadway and the point where the strip would merge into the other property of the Union Depot Company, 2,030 square feet.

Q. What valuation did you place upon that ground?

A. Well, I did not place the valuation on the property, I used the figures of the real estate men for that district the same as in the Great Northern property proper.

Q. What figure was that per square foot?

A. The first section, between the east end of the passenger station and the center of Broadway, $8 per square foot, making a total amount of $358,320; the second section, between center of Broadway and a point 270 feet east of same, where the strip merges into the union depot property, $4.25 per square foot, making a valuation of $8,628; or a total valuation for the entire strip of $366,948; to which I added the 25 per cent for railroad valuation of $91,727, making a grand total for the entire strip, for railroad purposes, of $458,685.

Recess until 2 P. M.

AFTERNOON SESSION.

CROSS-EXAMINATION.

By Attorney General YOUNG:

Q. You stated, Mr. Hayden, in your direct examination, I believe, that you had been connected with the engineering work of railroad construction for some thirty-two years?

A. No, that is a mistake. I don't think that was the question.

Q. This was a generalization; you were not asked that question specifically; isn't that true?

A. Not with the engineering work of railroads for that

length of time, no, sir.

Q. Well, during how many years have you been engaged in engineering work in connection with the Great Northern or any other railroad?

A. I have never been engaged in engineering work, pure and simple, for the Great Northern.

Q. Excuse me for saying engineering, I meant right-of-way work.

A. Right-of-way work, yes. My first right-of-way work was with the Pennsylvania railroad, though in a purely engineering capacity; that is, in making surveys and defining the limits of their right-of-way which had already been acquired, and setting stone monuments, defining the corners and angels and preparing maps from those surveys for permanent records. That work I was engaged in for seven years, from about 1879 to 1886.

Q. I don't care so much about particulars, Mr. Hayden, it is to get at the length of period of your service.

A. And, since I have been with the Great Northern, I have had more or less to do with the actual purchases of right-of-way, as well as the office work.

Q. Several questions were asked you in direct examination as to the various things which you had done while in the employ of different railways, which were evidently asked with a view to showing your competency for the work, the result of which you have brought in in this case; let me ask you whether you ever did this identical kind of work before for any railroad.

A. No, sir; not before I came with the Great Northern or the old St. Paul, Minneapolis & Manitoba.

Q. Did you ever undertake to make a valuation of this kind? By that I mean such a valuation as is outlined in these exhibits which you have brought in here, for this company before this work was undertaken.

A. You mean for this particular case?

Q. Yes.

A. Well, there was the Spokane Rate Case and the valuation for the state of Minnesota.

Q. The so-called valuation for the state of Minnesota consisted of answering certain questions that were propounded to you by the engineer for the Railroad & Warehouse Commission with reference to the extent of your real estate holdings and your opinion of their value?

A. Yes, sir; blanks were furnished for that purpose, which we filled out.

Q. And your answer to those questions you want us to understand is the first work of the particular kind which is embodied in these tables which was done by you?

A. I would qualify that by saying on such an extensive scale. Of course we have and I have made valuations for cost of right-of-way on various lines from time to time that we were about to build as to what they might possibly cost.

Q. Well, you don't consider that work of the same kind as the work done here; I understood you to say this morning that this work consisted of compiling tabulations and estimates showing your opinion of what it would cost to reproduce the Great Northern road; not to construct a road where there is none, but to reproduce the road where it now is; isn't that correct?

A. That is correct; yes, sir.

Q. Where you start out to make an estimate of the cost of a road where there is none, the problem is comparatively simple, is it not?

A. Well, it is about along on the same lines except that there you have conditions which are as of the present time.

Q. You are dealing with actual conditions in a case of that kind?

A. Yes, sir.

Q. And you are aiming at actual results to arise from an enterprise that you intend to undertake?

A. Yes, sir.

Q. But, as I understand your work as evidenced by these tables and exhibits, it consists of estimates which were founded not upon realities, but upon unrealities, based, if I understand it right, upon the supposition that the railroad did not exist where it does exist, but that the conditions which have largely been produced by the fact that the railroad exists there remained after the railroad was obliterated?

A. That is true.

Q. Except for the Spokane Rate Case and this rate case you never undertook that kind of work before?

A. No, sir.

Q. Your long period of experience, then, in doing the actual work for actual railroads would not have any tendency to qualify you to do this kind of work, would it?

A. I think it would.

Q. What makes you think that it would?

A. Well, I don't think anybody could arrive at an estimate without having had some actual experience in real work.

Q. But the estimate doesn't have to conform to the truth, it is purely speculative, isn't it?

A. It is almost purely speculative, yes, but it should be somewhere near the truth.

Q. It should be, but you can't tell, yourself, whether it is anywhere near the truth or not, because it is founded on a condition which doesn't exist?

A. It is founded on the supposition that you are going to reproduce something which a railroad has had there, and, the railroad taken away, you have to reproduce it in the same position as of that date.

Q. Yes. Now, the principle isn't the same in this undertaking as the one that would be involved if you were asked to

give the cost of reproducing a certain building on a certain site?

A. No, not the same.

Q. Because, while you could easily give a fairly accurate and entirely rational opinion as to the cost of reproducing a building or a structure of that kind, when you come to give the probable cost of reproducing a railroad, which includes the acquisition of its right-of-way through cities and villages and through a country which has largely been developed because of the railroad's existence, you are compelled, are you not, to consider circumstances that are almost an impossible conception?

A. Well, you are compelled to consider circumstances that have never arisen.

Q. And could not exist?

A. I don't know that they could or could not. We go on that assumption.

Q. Let me ask you whether, taking your line from St. Paul to Breckenridge, which has upon it very many small cities and a great many villages, do you think that those cities and villages would have existed there if your road hadn't been built?

A. I think a great many of them would.

Q. Would it be possible for the country adjacent to your road to have been built up and developed without transportation facilities?

A. There would have been other railroads besides ours.

Q. Oh, now, you are getting down to my line; I begin to understand you. You are presuming that if your road was not built another one would have been?

A. Well, either there or in its vicinity.

Q. Yes; I think you are entirely right about that, Mr. Hayden, and that is one of the reasons why I object to this method of valuing a railroad, by assuming to ascertain what it would cost to reproduce it, because if this road was not built at the time when it was actually constructed, some other road

would have been built in the vicinity in any country where there is a demand for a railroad, would there not?

A. I think so.

Q. And therefore these various cities and villages that I have referred to that are now located on your line between St. Paul and Breckenridge would have been the same cities and villages that they are now and they would have been on another railroad if your railroad had not been built?

A. Not necessarily; some of those villages are located in such a way that they are distributing points and supply centers for a considerable territory of farming country.

Q. But would there have been any farming country to supply if there had been no railroad facilities? How would it have been possible for a farming country to develop if there were no means for getting its products to market?

A. Well, of course, that is purely speculative. I think there would be farms, not in the same degree that there are now.

Q. Well, it is absolutely speculative, isn't it?

A. Why, we find in various parts of the country there are farms and settlements and even towns that are not reached by any railroad.

Q. Could you imagine a territory like between here and Breckenridge, for example, with no railroad accessible to it, being in anything like the condition it now is?

A. Not being in the condition it now is; no, sir.

Q. The land would be there, the land was there before the railroad was built, and there would be some settlement, undoubtedly, there would be here and there a settler; but isn't it altogether impossible to suppose that that portion of the state of Minnesota if entirely deprived of railroad facilities, and railroad transportation, would have developed into anything like the condition in which we now find it?

A. It wouldn't without railroads of some kind.

Q. Well, now, then, where you are starting out to give the

cost of the reproduction of your railroad, if you are going to start upon the theory that your railroad is not in existence and you are going to reproduce it, don't you think it is absolutely necessary to presume that no other railroad exists?

A. No, I didn't so consider it.

Q. You went on the theory that all other railroads in the state are in existence and capable of performing all the functions that they are now performing, but that yours only has been eliminated?

A. Yes, sir.

Q. Now, then, if you were going to value any one of the other roads, you would go upon the theory, would you, that your road does exist and that the other road does not?

A. For the purpose of the cost of reproduction, yes.

Q. You would alternate with the various roads of the state and imagine each one of them out of existence for the purpose of getting at the value of it and alternately consider that all the others that had been out of existence when you built the last one had been restored?

A. Yes, sir.

Q. Who ever suggested to you an idea like that for ascertaining the value of property?

A. I don't know that anybody did. Our attorneys asked me to make a valuation of what in my judgment it would cost to reproduce the right-of-way and terminals of our company as of a certain date.

Q. If your road had not been built, you have already said that in your opinion some other road would have been built in the vicinity; there is no presumption that the other road that you have in mind would be built on the identical site of yours?

A. No, sir.

Q. And if some other road had been built according to the volition of its promoters, it might be possible that it would be injudicious to ever construct your system in this state, there

might be no demand for it, might there not?

A. There might not.

Q. Did you take into consideration as to the probability with reference to that phase of it? did it ever occur to you that if you eliminated your road you would never get it back, some other road would have usurped its place?

A. No, that did not occur to me and was not considered.

Q. Do you not think, Mr. Hayden, that if you were going to imagine the road out of existence and you were going to undertake the computation of the cost of reproducing it you should also assume that all the conditions that existed when the road was first built have been restored, and consider the problem in the light of that situation?

Mr. HOW: I submit that the examination and cross-examination can be shortened by asking the witness if he doesn't think that Mr. Justice Harlan is wrong in Smythe v. Ames. I think these questions are calling for opinions on matters of law as to what he thinks would be a better method.

The MASTER: Well, I think the question is a proper one. I will not undertake to rule it out. If the witness can answer he may.

A. No, sir; I do not.

Attorney General YOUNG: So far as this legal question is concerned, your Honor, I think we would be justified in asking, inasmuch as counsel have several times referred to Smythe v. Ames as establishing a rule, that if they will show us in Smythe v. Ames any statement by the Supreme Court of the United States upholding a rule like this, that we will very gladly refrain from this examination. They might have found something in Smythe v. Ames that we never have seen.

Mr. O'BRIEN: We will, even in view of the affidavit Mr. How is going to make.

Mr. HOW: I have found it, as explained by subsequent decisions. I shall be glad to show it to you some time and might as well begin now.

Attorney General YOUNG: We are perfectly willing to take the law from Judge Harlan, but not willing to take it from Mr. How.

Q. Will you kindly make it plain, so that we will understand why, under your theory if you are going to suppose that the railroad is eliminated, you shouldn't also suppose that all of those conditions which have been produced by the existence of the railroad have also been eliminated in estimating the cost of reproduction.

Mr. HOLDEN: If your Honor please, I think the point I made in my objection appears from this testimony. This is asking Mr. Hayden to support the theory which the lawyers have undertaken to support. Now, he was only asked to give his opinion as a real estate man as to what it would cost to rebuy these lands today, not twenty, thirty or more years ago. Now he is asked to say why it is not proper for you to assume conditions of thirty years ago. He is not responsible for that; he was not asked to perform any such service in making up these figures. It leads him into a realm that—I say it advisedly—he is not competent to testify upon, because he is not a lawyer and he has not studied the phases of this case that are embraced in any such consideration; and, if I may say it, I submit earnestly that this cross-examination ought to be limited to the basis upon which he puts himself on the stand; that is to say, that he believes that to rebuy this, that or the other piece of this real estate today, under existing conditions, would cost so much money. It seems to me that is the fair realm for his examination, not why he did not proceed to make up figures upon a different theory; he had no option in making up these figures, because the theory was put to him, and I sumbit that the question that was last asked indicates plainly the reason for this objection. He is asked to say why he didn't take a different theory.

Attorney General YOUNG: He comes in here, your Honor,

and files these exhibits; the engineer of the road has come in and has filed other exhibits, each of which exhibits is labeled "Cost of Reproduction of the Great Northern Railway System." Now, if it is possible to fix rates upon some assumed cost of reproduction of a railroad, the state of Minnesota has a sufficient interest in this case to know upon what theory they have assumed to ascertain the cost of reproduction. We not only have a right to know what their theory was, but we have a right to know why they adopted that theory instead of a different one, why an irrational theory instead of a rational one.

Mr. HOLDEN: He did not adopt that theory, he adopted the theory he was asked to make those figures on.

Attorney General YOUNG: He comes in here and bolsters up these figures with the statement that they are absolutely right. Now, they are absolutely right for what? Not as figures, but as being the thing which they are labeled, "Cost of Reproduction of the Great Northern Railway." Now are we going to be bound and have our right to regulate rates as a state taken away from us without being able to tell why they adopted this theory of the cost of reproduction? I submit, your Honor, that there is no court that has ever said that that was the rule upon which rates should be fixed. It was intimated in a case in the supreme court of this state some years ago, but no other court has ever taken it up, it never will be upheld, it is an impossible theory, it is a theory which would place the entire property of the United States at the hopeless mercy of the railroads of the United States to follow any such theory of reproduction as this. Now, we want this: We want not only to know why they adopted this theory, if they are going to imagine something out of existence which is in existence, but why they didn't follow that up by going back to the condition which existed when that thing was in existence, and take out of it also all of the circumstances which were brought into being by its existence. We want to

know that. That is a rational question, because, if we are going to fix rates, not on the present value of railroads, but on some imaginary theory of what it would cost to reproduce them, we certainly are interested in knowing what that theory of reproduction is going to be; and we have a right, at any stage in this case, either by cross-examination or by direct testimony offered on our own part, to contest the validity of this method of ascertaining that cost, and to urge in our own favor some other system upon which the cost could be more rationally ascertained. We are the defendants in this case, we have a right to attack their theory upon every possible point where it is vulnerable; they are the ones that have assumed the burden of showing that these rates are confiscatory. If they are confiscatory, it must be because upon the fair and reasonable value upon which this company is entitled to a return these rates will not earn that return. Now, aren't we going to be permitted to go into this matter, and, as I say, contest on every possible theory upon which their claim is vulnerable its correctness? I certainly think we are. I am not going to take the time of this Court unnecessarily. There has been a great deal of time taken of this Court on cross-examination, we have permitted them to ask all sorts of questions, leading and otherwise, we have not made ourselves obnoxious; we are perfectly willing for them to put their testimony in and we want to put ours in. We will take a good deal less time if they will permit us to ask these questions than we will in needless argument of what our rights are; we are going to keep within the legitimate bounds of cross-examination and maintain the respect due to this Court.

The MASTER: Will the answer to this question be of any use in this case?

Attorney General YOUNG: I think it will.

The MASTER: He simply says he was told to make up these figures upon a certain theory and he has done so. Now whether

that is the proper theory or not if it is the wrong theory the testimony goes for naught—

Mr. HOW: And we have no testimony.

The MASTER: —and you have no testimony, in that case.

Mr. HOW: Right.

The MASTER: But as to what his opinion may be as to whether that is the correct theory or not he has not been examined.

Attorney General YOUNG: Your Honor, he testified that it is the correct cost of reproduction. He has testified, absolutely, that it is, in his opinion, and that he is a man of thirty years' experience.

The MASTER: He simply goes on and states exactly how that was made up, that he was told to make it up in a certain way. Now, if that theory is right, this testimony is competent; if that theory is wrong, the testimony is incompetent and it doesn't prove anything. I want to give you just as much latitude as possible. All parties have had a great deal of latitude in this case and I want to give you full latitude, but I really cannot see that this line is really cross-examination; he has not been asked as to whether that was a correct theory or not; he says, "I made up these tables on a certain theory," and whether it is right or wrong his opinion will be of very little use to any of us, he has not been asked as to whether it is the correct theory or not.

Attorney General YOUNG: I apprehend, your Honor, that if we were to rest this case right now, as we would be strongly tempted to do, that we would find the Great Northern Railroad claiming that they had proved absolutely that this was not only the correct theory but the only theory. Now we have a right to the question and counsel have no right to say—

The MASTER: I know, General, but you have got all the facts as to how that was made up and on what theory it was made up, and if it is the wrong theory they have got no testimony in the case on that point.

Attorney General YOUNG: Well, have we full testimony as to the theory upon which it was made up? Have we any testimony, or anything else, except that it was this man's opinion of the cost of reproduction?

The MASTER: Well, he states on what basis it was made up. If it was a wrong basis, that is the end of his testimony, it has no weight whatever.

Attorney General YOUNG: Now, I want him to tell upon what theory it was made up and why that theory, above any other theory, was selected.

The MASTER: Perhaps he doesn't know.

Mr. O'BRIEN: Well, that is a sufficient answer.

The MASTER: He was told to make it up that way.

Attorney General YOUNG: If he doesn't know, that is a perfect answer.

The MASTER: If he was told to make it up that way and he has made it up that way—

Mr. O'BRIEN: Doesn't your Honor realize that the theory is not fully explained in the absence of testimony of this sort? And besides that, I want to say that it would not be at all proper for us to assume that if the wrong theory is adopted, of the cost of reproduction, that the testimony is therefore incompetent. My personal judgment is that some evidence, at least, as to certain of the items as to the cost of reproduction, is competent as one of the elements to be taken into consideration in arriving at the true value. Now, the effect of the objection is this, that it prevents us from ascertaining the details of the theory that is spoken of here. For instance, until the question was asked Mr. Hayden by Attorney General Young on cross-examination whether he assumed that all the other railroads were in existence, I didn't know that that was his assumption; I think I have heard other witnesses say in other respects that that was their assumption, but I didn't know that that was the assumption that this was made up on.

The MASTER: Well, Mr. O'Brien, he will be permitted to answer in regard to every theory upon which any statement he has made has been predicated and if it turns out that the assumption is that all the other railroads were in existence at this time when this railroad is to be reproduced, anything which goes or has any bearing upon any statement which he has made here is entirely competent and proper; but when he is told to proceed upon a certain theory and says "I did proceed upon that theory" whether that is the right theory or the wrong theory is not for him to say.

Mr. O'BRIEN: Would it be important and helpful in this case for your Honor to know why the assumption was not indulged in of the railroad being eliminated and the surrounding property restored to its original condition? I think if I were finding the facts in this case and an expert witness testified, I would be glad to know why he didn't do that in order that I might determine the correctness of his theory.

The MASTER: I don't think that it would have any bearing on his testimony and I don't think it would have any influence with the Court.

Mr. O'BRIEN: It has no bearing upon his testimony if he were a mere automaton.

Attorney General YOUNG: That was just what I was going to ask him.

Mr. O'BRIEN: And if he says he doesn't know why he did it, that is satisfactory; but if he is an intelligent gentleman and an expert witness, as I believe he is, and if we are keeping to the point here of ascertaining what is the correct principle, his reasons for presenting his tables in a certain way are proper, and I have never known of a case where a question of that sort upon cross-examination has been excluded. The theory of the objection is that he should not answer this question because he is not responsible. Now, let us find out if that is so or not.

Mr. HOLDEN: Well, the objection went to the question which asked him why he didn't adopt another theory. Now then, any question which bears upon the theory he did adopt and the different elements that enter into his figures here is a competent question, but to ask him why he didn't adopt the conditions as they existed when the road was originally built is the point of my objection, because that is what the last question was driving at. I say there are the two lines, and Mr. O'Brien's last statement indicates very clearly that I am not trying to ask your Honor to shut out any details entering into this theory, but we do think you ought to shut out considerations as to why he did not reject this theory and adopt another theory.

Attorney General YOUNG: Now, let me ask you, Mr. Holden, if you will permit me,—

Mr. HOLDEN: Mr. How has offered himself as a witness, you know.

Mr. HOW: Yes, I am willing to serve.

Mr. O'BRIEN: I was going to say, Mr. Hayden is here as a gentleman of experience giving his judgment on these values. He comes in here with these beautifully prepared tables, and is entitled to all the credit that a man in his position is. Now if he didn't consider the various methods by which this might be done, if he didn't consider the propriety of rejecting one basis or accepting another his judgment as to his final conclusions amounts to nothing, and if your Honor were ruling on this case, if a jury were trying this as a condemnation case and the main expert went upon the stand to testify as to values, to say that he could not be cross-examined and to say now hasn't a certain thing been eliminated—supposing Mr. Holden says we want to arrive at the true value that should have been taken into consideration, supposing the expert real estate witness does not agree with the theory upon which these are made, haven't we a right to know it, if he does not assume any re-

sponsibility for it, haven't we a right to know it?

The MASTER: Well, he is not being examined as to what is the proper theory, but he is being examined with reference to a certain theory. Now you are not asking him any question in regard to that theory that has any bearing upon the valuations of the matters concerning which he testifies, but the counsel take the responsibility themselves of having adopted the theory on which this testimony is to be given and received, and if they are wrong, why they are out of court on that point.

Attorney General YOUNG: It does not appear, if your Honor please, in the record that he was instructed to bring in a certain set of figures here to suit a theory of the counsel. He is put in here as a witness and he is asked about his long years of experience in order to show that he is a competent expert. That was asked him in order to give weight to his testimony, on the theory that he is the witness and not that he was giving figures here which he was directed to prepare, but figures based upon his judgment, and he was asked the question specifically, your Honor will remember, "In your judgment is that the correct figure for the cost of reproduction?"

The MASTER: Yes, but his judgment was predicated on that theory.

Mr. O'BRIEN: Of course, if he is here in the position of a dirigible expert, that is a different matter; if he is here as an independent expert, we ought to know it.

Mr. HOLDEN: He is not here as an expert on theories, but as an expert on present land values.

The MASTER: According to a certain theory.

Mr. HOLDEN: I think his direct examination very plainly shows, at the very early part of it, that he was requested to prepare this set of exhibits on the theory of what it would cost the railroad to reproduce the lines today.

The MASTER: Yes, and he should give all the facts and circumstances upon which he predicates his figures—

Mr. HOLDEN: Exactly.

The MASTER: —but why some other theory should have been adopted does not seem to me a matter concerning which he has been examined or that it would be material. If that theory upon which he has testified is wrong, his testimony goes for naught.

Attorney General YOUNG: How are we going to find out what his opinion is as to the correct theory? He is the man that is produced here to support this theory.

The MASTER: He has not been examined as to what is the correct theory.

Attorney General YOUNG: My recollection as to what he has been examined on and your Honor's are not identical.

Mr. O'BRIEN: If your Honor will bear that in mind, and strike out his statement that this is a correct showing—

The MASTER: It is on that theory and can't be on any other.

Mr. O'BRIEN: This witness' and Mr. Hogeland's testimony, both, will bear the construction, if the case stopped here, that this testimony is not only prepared upon this theory, but it does show that it is the proper method of arriving at the true value of the lines for the purpose of basing a return in rates. I remember Mr. Hogeland's more distinctly than this witness'. Mr. Hogeland testified positively that in his opinion it was the proper and fair and true method of arriving at it.

The MASTER: But he has testified, and will be permitted to testify fully as to how he reached those values; and of course his general answer of that kind is given with reference to the methods pursued by him, and if that method is wrong, and if his theory is wrong his testimony fails, that is all there is about it; and I think counsel concedes that. I think you concede that, Mr. Holden,—if the theory is wrong, his testimony fails; you don't claim anything because he has stated in a general way this is the correct valuation of the property?

Mr. HOLDEN: Certainly not; we simply claim his answer —and I think an examination of the language used will show

that he testified that in his opinion these figures were accurate, both as to acreage and as to values.

The MASTER: You don't claim that his testimony would be of any value if his theory is wrong?

Mr. HOLDEN: If the theory on which the testimony is predicated is wrong, why the testimony fails.

Attorney General YOUNG: Now, do we understand, Mr. Holden, that you offer this testimony as evidence of the true cost of reproducing the Great Northern road today, or do you offer it for some other purpse?

Mr. HOLDEN: I offer it as the present value of reproducing the lines embraced in the Great Northern System in the state of Minnesota.

Attorney General YOUNG: And as the true theory of reproducing it?

Mr. HOLDEN: That is different, we will argue that later.

Mr. HOW: We have got to argue that, General.

Mr. HOLDEN: And when Mr. How takes the stand, perhaps that may be a subject of examination.

Mr. O'BRIEN: Of course we would like—I don't want to say this offensively—

The MASTER: Go ahead, Mr. O'Brien, I understand you.

Mr. O'BRIEN: We desire to know if the Master rules this out as immaterial, because there has been an immense amount of evidence, and any evidence that is—

The MASTER: I am inclined to think that that question ought not to be pressed; while I have very little latitude in regard to cross-examination, it does seem to me irrelevant and immaterial, and if it is pressed I should be inclined to rule it out.

Mr. O'BRIEN: Then we ought to submit a motion to strike out all this evidence.

Attorney General YOUNG: I certainly would not feel that we had properly cross-examined this witness if that

question is withdrawn. I will take the ruling of the Court on it. If we can't ask that question, we want to know it. Now this, your Honor, is perhaps the vital question in this whole litigation. The exact rates involved here don't amount to very much. Take the Northern Pacific, it isn't here litigating over a loss of $120,000 on their entire System; they are here litigating the principles involved in this matter of rate regulation; we are here litigating these principles. When these principles are settled, I believe the state and the railway companies can get along without any controversy, and it is extremely important that these questions be settled and settled right. The railroad companies have a great many fundamental rights in this litigation and we have a great many; the settlement of those principles is what we are after, and when those principles are settled it is a mere matter of computation as to whether the rates are right or not. At the foundation of the whole inquiry lies the question as to what is the basis for the computation of income; the only other vital question in this case is the ascertainment of the cost of the service between interstate and domestic business,—two great leading ideas. Now, it seems to me that this is a new question, notwithstanding what my friend Mr. How says about the ruling of Judge Harlan in the Smythe v. Ames case, this is an absolutely original question so far as the federal courts are concerned as to the basis upon which a railway is entitled to an income. If the theory upon which these figures are prepared is going to be upheld, then the right of regulation is absolutely lost, there isn't any question about that, because if this kind of a valuation can be upheld legislatures should meet periodically to raise rates and not to lower them, because if all this imaginary value is going to be injected into railways, there will never be any question about reducing the rates, they couldn't be reduced at all. Here is one of the largest railway systems in the United States, that comes into court with this sort of an

exhibit, and upon this sort of a claim, offers its chief engineer and the chief man in its right-of-way department who considered this question to uphold this form of valuation. If there is to be no latitude allowed in questioning the propriety of that method of valuation, then the whole question is settled, we might as well get out of court. Now, I do not believe (I think I can say that with a great deal of moderation) that your Honor is ever going to uphold that form of valuing a railroad property and to say that the imaginary cost of reproducing a railroad today through a country and in cities that have been on the one hand developed and on the other hand built up by the fact that the railroad existed, and that you are going to take those conditions produced by the railroad and yet eliminate the railroad and find out what it would cost to reproduce it; I don't believe this court is ever going to hold that.

The MASTER: Well, of course, in ruling on a question of this kind the Court is not passing on the theory at all or the correctness of the theory.

Attorney General YOUNG: Now, we consider this theory very vital to this case, your Honor.

The MASTER: Yes, that is very true but whether this witness' testimony can be of any assistance in that regard is another question, or whether it is proper cross-examination or material. I have this in mind, that the question in my own mind is immaterial, so far as this witness is concerned, but I doubt whether I have a right or ought to exclude testimony simply because it is immaterial when it is on a hearing before me as a master. When it goes to the Court it is for the Court to pass up upon it and determine whether it is material or not.

Attorney General YOUNG: Well, I will withdraw that question for the time being, and I think we can ask the witness questions which will show that this inquiry is justifiable.

The MASTER: Very well, proceed.

Attorney General YOUNG: The last question is withdrawn.

Mr. O'BRIEN: I understood the rule on that to be that the Master only excluded evidence that was scandalous.

The MASTER: Well, of course, I think the Master would have authority to exclude testimony that was so thoroughly irrelevant and immaterial that it was uselessly taking up the time of the Court, for instance, going into something else concerning which he had not been examined at all and things of that character.

Mr. O'BRIEN: I confess I don't think it is within your Honor's jurisdiction to exclude evidence on the ground it is immaterial when seriously offered by a counsel in the case. There is possibly enough doubt from the fact of reputable counsel insisting that it is material and explaining why.

The MASTER: Well, if it was not proper cross-examination at all, and the Master was very clearly of opinion it was not cross-examination and you were unwilling to make a witness your own and going into some other branch of the case or on some other branch concerning which he had not been examined, I am inclined to think that it would be the duty of the Master to prevent an examination of that character. Well, proceed, General Young.

Mr. HOW: Let me suggest, I don't like to rest upon the construction of the Master's powers offered by counsel. I think the Master has the power to rule out impertinent testimony, and I understand impertinent testimony to be that which no reasonable mind can consider as helpful in the lawsuit.

The MASTER: Well, I have already indicated what I thought.

Mr. HOW: Yes, but I don't want to rest upon the construction of the Master's powers that he has no right to rule out anything unless it is scandalous.

The MASTER: Well, I didn't assent to that doctrine. I guess Mr. O'Brien don't quite stand on that.

Mr. O'BRIEN: Oh, I think Mr. How's definition of imperti-

nent testimony is true, but of course if the Master rules we are not reasonably minded men, why that—

The MASTER: Proceed, General.

Q. Now, Mr. Hayden, let me understand your attitude with reference to these tables and exhibits which you have offered. Do you present these tables and exhibits as embodying, in your opinion, as an experienced railroad man, the true method and the best method for ascertaining the cost of reproducing the Great Northern Railway System, at the present time?

Mr. HOLDEN: General, you mean the land, I suppose?

Attorney General YOUNG: The land, the rights-of-way and terminals.

Mr. HOW: The present cost of acquiring them?

Attorney General YOUNG: No, I have asked him the question now, if you will excuse me.

A. I don't know that I got the qustion.

Question read.

A. If I may answer this in my own way, General?

Q. Yes.

A. In getting at the value of reproduction of the right-of-way and terminals, I tried to get as near an accurate estimate of what I thought it would cost from my own judgment and the judgment of others to reproduce individual tracts of land throughout the state as they exist today; for instance, running through a town, if I find the town is built up on each side of the station grounds and the town lots have a considerable value for business purposes, I have assumed for the purpose of this estimate to get a cost of reproduction, that the station-ground stripped would be of the same value as the adjoining lots if divided up into town lots of the same size, and I don't know that I could get at it closer by any other method. It is my judgment that that is the proper method.

Q. You are offering these exhibits, then, and claiming that in your opinion this is the true method for getting at the pres-

ent value of the Great Northern Railway System, are you?

A. No, my exhibits are presented as in my judgment the cost of reproducing the lands as they exist today, as of the date of June 30, 1908.

Q. Well, what do you mean by the cost of reproduction, do you mean that you are offering these tables to prove what the Great Northern Railway was worth, so far as right-of-way and terminals are concerned on that date?

A. What I wanted to prove was that this is my judgment of what it would cost to repurchase those same tracts of land as of that time.

Q. Did you adopt this method as your own? Did you originate it, or are you preparing these figures according to a plan or theory suggested to you by someone else?

A. No, I don't know that I can claim it as entirely my own, and yet it is the result of having conferences with other right-of-way men and with the theories followed out by other states in arriving at the cost of reproduction. I have had the benefit of all that knowledge.

Q. It is your understanding of your status, then, as a witness here, that you are testifying that this in your opinion is the way to do this work, is it not?

A. Well, I think it is, because I have done it that way. I was asked to make a valuation of the cost of reproduction.

Q. You don't understand that you are here presenting the table of figures which somebody told you to go out and prepare and you are not exercising your own judgment as to the method?

A. No, that is the result of my judgment.

Q. That is the result of your judgment?

A. Yes, sir.

Q. Of course in preparing these tables you exercised your discretion and considered everything that you thought was proper to consider as bearing upon that question?

A. Yes, sir.

Q. And as suggested by counsel, you excluded everything that you thought ought not to be considered?

A. Yes, sir.

Q. Now, in concluding that this was the correct theory to follow and that these are proper and correct computations, you must have considered the advantages of this theory and the advantages of any other theory that might be used and the disadvantages, respectively, of this and other theories before you settled upon this one as the correct one, did you not?

A. I can't say that I did, General.

Q. Didn't you consider that there might be other ways of getting at the abstract question of the cost of reproducing a railroad?

A. Reproducing the right-of-way and terminals, you mean?

Q. Reproducing the right-of-way and terminals, yes, reobtaining them.

A. No, I think all I did was to determine in my own mind what I thought was the proper method to proceed and then to follow that out.

Q. Did you have any difficulty in trying to apply your reasoning powers to a condition which would exist upon the ground over which this railroad passes with the railroad eliminted? In other words, if you imagined the railroad eliminated, would you not naturally say to yourself that if the road was eliminated, conditions with reference to this real property would be necessarily entirely different, and that difference in condition must be taken into account?

A. In making up the valuations I assumed that the conditions were as they are today, that we were going to build a new line through that farming country which was developed and built up and cultivated as it is today, and what it would cost to buy a right-of-way the width we require through that kind of country at this time, that is, as far as the farming country is concerned—

Q. Did anybody tell you to adhere to that theory?

A. No, sir; that is my own judgment in the matter.

Q. It is based entirely on your own judgment?

A. Yes, sir.

Q. Well, now, I want to ask you, what I asked a while ago, if you imagined the railroad eliminated, why did you not also imagine elimniated all of the conditions which have been brought about by the existence of the railroad before you begun the computation of the cost of reproduction?

A. I don't think we could get at the value of the cost of reproduction if we did as of today or as of June 30, 1908.

Q. Following the theory that you profess to have followed, you took the market value of the adjacent property on both sides of the right-of-way, property of the same general character, and you assumed that the right-of-way property had the same value as that adjacent property, did you?

A. No, I think that you will find that I stated it the other way: that I took my own judgment as to what I figured it would cost to buy right-of-way in the various districts in the state through which the road runs, and then in order to get a value which is called a market value, for the purpose of filling in the Minnesota blanks I divided that amount by three, on the theory that the real estate men or the right-of-way men in conference before we started to make out the blanks for the Minnesota Railroad and Warehouse Commission had agreed that the right-of-way value would be about three times the value of the lands; but I didn't work from the basis of the value of the land up to the right-of-way value, but rather from the market value down, from the right-of-way value—got at it a little differently.

Q. There wouldn't be a particle of difference in the result, would there?

A. There might be, yes, owing to the conditions in certain districts.

Q. What do you claim with reference to that? do you claim that it would actually cost three times as much in a rural district to obtain right-of-way for a railroad as farm land is worth, for example?

A. I don't think you can lay down any absolute rule of percentages in that respect. If your line goes through a country diagonally, cutting up the quarters and the sections and leaving flat-iron pieces, you have to pay more than you would if you run on section lines and the character of the country where it is rough and rolling, where you cut it up so that there is not the same chance for crossings, and things of that kind that there would be in a flat, smooth country, along high cuts or fills,—those things all have a bearing on the cost of a right-of-way. You can't lay down any cast-iron rule that a right-of-way costs three times the market value of the land. If you could, a right-of-way purchase would be very simple, but you can't do it.

Q. Well, I am asking you for the average cost of right-of-way with reference to the market value of the lands through which your railroad goes. Isn't there a multiple somewhere near that that is fairly fixed as being the average of experience?

A. I think perhaps the multiple of three is fair in this particular case, but I don't think any right-of-way man could use that as a general average.

Q. Well, in making an estimate you must take some multiple, must you not?

A. Well, you should.

Q. Well, now, then, in your opinion, in making an estimate through a country such as that traversed by your road, the multiple of 3 is not far out of the way?

A. I think it is reasonably close.

Q. And would be a safe multiple to adhere to, would it not? I don't think we will question that very seriously. Now,

then, following that theory, Mr. Hayden, the actual value of right-of-way through a country like the country traversed by your road is theoretically three times the value of the adjacent agricultural land, is it not?

A. Well, it varies, of course, in different districts. It might be fair to say that that is reasonably near what would be an average.

Q. Well, now, I don't want any controversy with you over the multiple, but I want to know what multiple you think would be right. If three isn't right, what is your opinion about the correct multiple?

A. It is very hard to say. In the first place, we never have obtained 2,000 miles of right-of-way all at once, so that we can't tell what the multiple ought to be.

Q. Well, but you have taken some multiple, haven't you, in this case?

A. I have used a multiple of three in getting at the market value, but I used my own judgment as to what the right-of-way value was.

Q. Well, do I understand that you have undertaken to fix the value of adjacent land by taking one-third the value of your right-of-way, or that you have fixed the value of the right-of-way by multiplying the value of adjacent land by three—which is it?

A. I have worked down from the right-of-way value, General; and in order to verify that I have had opinions from various sources all over the state as to what the market value of lands was, and when I made that division I have of course tried to find out whether I was right or wrong.

Q. Why did you work down instead of working up?

A. Because my experience has been not in land value but in right-of-way values.

Q. Well, how did you get right-of-way values? is that upon the valuation of the lands?

A. Well, there is a certain way; of course if you go out to buy right-of-way between certain towns, you figure that it is going to cost you about so much a mile to get that right-of-way. You have an experience which leads you to think those things.

Q. Well, if you know the value of right-of-way regardless of the value of adjacent lands without applying any multiple, what did you use the multiple for?

A. We applied the multiple in the first place, to fill in the blanks furnished by the State Railway and Warehouse Commission.

Q. I don't care anything about that. We are talking about this case now, and your testimony. Just leave those blanks between you and the Railroad and Warehouse Association out of the case; they are not in here.

Question read.

Mr. How: I desire to instruct the witness that he is at liberty not to leave the blanks furnished by the State out of this case at command of the Attorney General if it is proper for him to bring them in to qualify his answer.

Q. Subject to the qualification of Mr. How's instructions, kindly answer the question that I asked you.

The MASTER: Answer the question if you can.

A. Well, I used the multiple in order to get an idea of the market value of the lands and to see that that corresponded with the values given by other people as to market value, so as to know whether I was within the limits of the ratio which I had determined in my own mind should be a fair ratio between the market and the right-of-way values.

Q. And that was three times?

A. About three times, yes, as an average.

Q. Now, Mr. Hayden, having satisfied your own mind that the ratio of three is the proper ratio between the value of adjacent property and the value of right-of-way, why isn't it

the logical plan to first ascertain the market value of adjacent property, and then by applying your ratio or multiple of three find the value of your right-of-way?

A. Well, it might have been, but I worked the other way, as I told you.

Q. Well, if you found that your valuation was too low, so that the using of three as a divisor instead of a multiplier it put the value of your land below the market value, what did you do?

A. In a great many cases, I let the right-of-way value stand as it was.

Q. You didn't compel the adjacent men to sell their farms at that price?

A. No, sir.

Q. I can't, for the life of me, understand how you worked down instead of up on a thing that rests its foundation upon that which is presently ascertainable, such as the market value of land.

A. When I put in this estimate as my judgment of the cost of reproducing the right-of-way, you notice I didn't give the total of market value, I gave only the right-of-way value. That market value is simply just for matter of reference, nothing else.

Q. But your right-of-way value does depend on the market value, does it not?

A. Not necessarily, but it has a relation, of course.

Q. Not necessarily. Suppose you were having land condemned for right-of-way, what would control the jury or the commissioners conducting the condemnation proceedings?

A. Not the value of the land alone, General.

Q. They would take the value of the land alone as the basis upon which to compute the amount that you ought to pay for your right-of-way, the damage resulting from the severance of that land from the adjacent land and the injury to the remaining property, would they not?

A. Yes, but in condemnation proceedings, as we come to them and as we have found in our experience, the multiple runs up sometimes 50 or 70 times the value of the land alone. Now, we have had cases where condemnations—we have a case, I recall one now, near Fairhaven, where we have got eleven acres along the river bluff, that so far as the actual land value was concerned, wasn't worth $50 an acre; for that eleven acres they got $75,000 in the condemnation suit.

Q. Well, that was the case of a jury trying to "do up" the railroad company, wasn't it?

A. I don't know what it was; that is the condition, and that is what we had to pay. There is another case, just a little ways below there, on the same coast, where we ran in front of a stone quarry, there was a quarry running right down into the sea—

Q. Well, I don't care anything about that.

Mr. HOLDEN: Let him finish his answer.

Attorney General YOUNG: I don't care about those individual instances.

Mr. HOLDEN: Well, I do.

WITNESS: That shows you can't always fix the ratio between the right-of-way and the market value.

Q. I want to ask you, once for all: Have you fixed a ratio or have you not, on value in Minnesota?

A. In Minnesota I have figured that three would be a reasonably fair value.

Q. Well, now, then, let us stick to three, we don't care anything about your individual experiences out in Washington or anywhere else. Having reached three as the proper multiple or as expressing the ratio that ordinarily exists between right-of-way value and the value of adjacent lands, do you want to say, as a final answer, that you do not in estimating the cost of reproduction of the right-of-way of the Great Northern Railway Company first ascertain the value of the adjacent lands

and apply that multiple to it?

A. I first ascertained the value of the adjacent land. yes, but I didn't always use that multiple; I didn't use it as a uniform thing.

Q. Well, you used it substantially, didn't you?

A. Substantially, yes, but it varied in various places.

Q. But the thing you first ascertained was the market value of the land adjacent?

A. The market value as given by people in that vicinity—in the vicinity of each station, for instance.

Q. The value which you assumed to be the market value?

A. Yes.

Q. Now, I would like to get a definite answer from you—that, as an ordinary proposition, three times that actual value is the value which you placed upon the right-of-way of the railroad?

A. In the state of Minnesota that applies, yes.

Q. This is the state of Minnesota that we are testifying about?

A. Yes, sir.

Q. Now, this market value with which you started, in ascertaining this right-of-way value, is the ordinary market value of the adjacent property for any purpose for which it is adapted, is it?

A. That is the purpose for which it is now being used, for farming or for village lots or town lots.

Q. Assuming it is being used now for the purposes for which it is adapted, and the additional amount which you allowed by the application of this multiple was intended to include all the other elements which go to make up the railroad value and the railroad cost of the right-of-way?

A. The cost of obtaining it for a railroad right-of-way.

Q. Would you please enumerate the things that are included in the additional cost to the railroad of its right-of-way

over the market value of adjacent lands?

A. There are several things that enter into the measure of damage for right-of-way over the market value of the land; the principal one is the severance or cutting of the property, one part from another, so that it cannot be used, in the case of farm land, to as good advantage for a farm as it could without the railroad; there is sometimes the taking of buildings or the necessity for moving them; then there is a damage arising by reason of running between a man's house and his barn, destroying his well or cutting off his pasture from his farm yard, or something of that kind,—there are a great many elements of damage to be taken into consideration.

Q. And all of those things, combined together, make up the justification for this multiple that you have applied?

A. Yes, sir.

Q. It is also true, ordinarily, is it not, that a little more is demanded of a railroad company for land than is demanded of others, that has got to be taken into consideration as a part of this enhanced cost that railroads must pay for their right-of-way—they are usually asked more than the market value, are they not, for the land, when they come to buy it?

A. Well, I think it is the same as any market where a demand has been created, if a railroad has to have it people know that they have to have it in a certain place, usually, and ask more than they would for other purposes, and also for the reason that it is a detriment and a damage to the balance of their property.

Q. And, as you stated, all these things are the things which go to make up the justification for allowing the treble value for railroad right-of-way?

A. Yes, sir.

Q. Now, then, the most of your railroad was built a good many years ago in this state?

A. Yes, sir.

Q. The main line especially—the two main lines—the Breckenridge division and the Barnesville division?

A. Up to St. Vincent.

Q. At the time that those roads were built, Mr. Hayden, and the right-of-way for them acquired, it is undoubtedly true, is it not,—that is, it is probably true—that they were obliged to pay for their right-of-way about three times the actual then value of adjacent lands?

A. I can't say as to that, General; that was before my time.

Q. Well, but don't you think, as a matter of fact, that that rule which makes it necessary to take into account these additional items of cost of right-of-way existed then just as well as they exist now?

A. I think they did to a certain extent; whether they did to the same extent or not I couldn't say.

Q. And it is a safe proposition, from your experience as a railroad man, is it not, to state that whenever a railroad is built through an inhabited country, the chances are the railroad company has been obliged to pay for its right-of-way about three times the value of adjacent lands?

A. There is a difference in the different classes of country, as I stated this morning that in a new country you do not have to pay as much as three times, and in a better settled country you sometimes have to pay more than that; it depends upon the character of the country you are building into.

Q. An entirely new country desiring a railroad might give the right-of-way?

A. They do, in some cases.

Q. But if you were called upon to say what the value of the right-of-way of a railway company was, built through a new country, regardless of whether they had to pay for it or not, would you not say that its value is substantially three times the value of adjacent property?

A. We are speaking of Minnesota now?

Q. In Minnesota.

A. Yes.

Q. What is your answer to that?

Mr. HOLDEN: At what time do you mean, now or—

Attorney General YOUNG: At the time the road was constructed. I am talking now about the time the road was constructed that it was worth that.

A. The original railroads of the Great Northern in the state?

Q. At the time of construction.

A. Well, it is pretty hard to make a uniform percentage of three. As I say, it varies so much that—

Q. Well, what would your opinion be as to the correctness of that rule in this state?

A. I think for the present existing lines, as they are today, that that would not be far out of the way one way or the other.

Q. If you were asked what the value was of the right-of-way of a railroad at the time it was built in this state through the agricultural portion of the state outside of the cities and villages and were given the value of the adjacent lands through which it passed, you could ascertain the right-of-way value with reasonable certainty, could you not, by applying that multiple?

Mr. HOLDEN: It seems to me, if your Honor please, that that calls for a pretty wide range of speculation on the part of this witness—to go back twenty-five or thirty years ago and endeavor now to estimate what the value of the right-of-way then was or what the value of adjoining lands then was.

Attorney General YOUNG: Have I asked him that?

Mr. HOLDEN: It seems to me it is exactly the purport of your question; you are asking, if he is given the value of adjoining lands, could he then state the value of the right-of-way —thirty years ago.

Attorney General YOUNG: I am not asking it as of any time,

your Honor. That is a fixed ratio—

Mr. HOLDEN: The witness has already said that in a country that is new and where the lands are not settled up, conditions are different than they are when the country is settled up and conditions have matured.

The MASTER: It seems to me he can answer that question taking everything into consideration.

A. Well, I can only say, as I have said before, that the multiple of three is perhaps a fair average, although it does not represent any fixed multiple that you can base your estimate on absolutely.

Q. I think you have said, though, that as far as this state is concerned, you think that is a fair multiple?

A. I think it is fair, yes.

Q. In other words, if your road were built through western Minnesota at the time when lands were worth $5 an acre, the right-of-way value would be about $15 an acre?

A. Well, I would have to qualify that again, because when lands were low and the country was new we didn't pay as much as we do when conditions are matured.

Q. That would be the maximum, wouldn't it?

A. That would probably be the maximum, yes.

Q. We are not going to quarrel with your multiple very much, Mr. Hayden; I think perhaps the multiple is somewhere near right. The building of a railroad through a new country ordinarily very rapidly enhances the value of the land, does it not?

A. Yes, sir.

Q. If a railroad is built through a country when the land is worth $5 an acre and when the probable maximum cost or value of the right-of-way would be no greater than $15 an acre, do you think it a fair proposition, as a railroad man, to apply that same ratio say a few years later when the agricultural land has been enhanced to $10 an acre?

A. I think if you are arriving at an estimate of the cost of reproducing that same right-of-way as of today, yes.

Q. You would not say, however, that that was the value of the right-of-way?

A. I should say that, in my judgment, would be the cost to reproduce it.

Q. What do you say as to the question as to whether it is the value of the right-of-way?

A. Well, value for what—for railroad purposes?

Q. Value for any purpose—for railroad purpose, yes.

A. Well, if it were going to cost that to get it, I would say that was the value of it, yes, to reproduce it.

Q. In the instance that I have called your attention to, that is, after land originally worth $5 an acre had increased to $10 per acre, you would call the railroad right-of-way that originally cost $5 an acre worth $30, would you?

A. In that case, yes.

Q. In other words, in your opinion the right-of-way of a railroad would continue forever to increase at three times the rate of increase in the value of adjacent property?

A. Well, qualifying that question by the fact that three is not an absolute factor, but it is a factor—

Q. Well, assuming that three is the absolute factor.

A. Then I think in that case it is fair as of this time; it might in twenty years from now be different, but as of this time I would say yes.

Q. And when the land that was adjacent to the right-of-way became worth $100 per acre, you would call the right-of-way worth $300 per acre, would you?

A. I think in those cases it might be worth more, General, if you had to go and buy a new right-of-way in the same district.

Q. And if the land ever became worth a thousand dollars an acre, you would call the railroad right-of-way worth $3,000, would you?

A. I think it would increase even faster as the land got more valuable.

Q. Did you ever stop to consider how long it would take, if that ratio were applied to the railroad property throughout the United States before the railroads would absorb the value of all the other property in the country?

A. I never have.

Q. Did you stop to consider, in estimating the value of your railroad right-of-way and applying this theory of treble value to it, that property acquired and used for a railroad right-of-way is a mere public highway, or did you consider it to be owned as a purely private enterprise?

A. I don't know that I took that into consideration, General; I just figured what it would cost to buy it at this time.

Q. You do know, do you not, that the only right which a railroad has in the land used for its right-of-way and terminals is an easement or a right to use, and that the railroad purposes do not carry with them the ownership of the fee?

A. You mean in case of condemnation or purchase?

Q. I don't care whether it is by condemnation or purchase, does it make any difference who owns the fee?

A. Well, we have always understood, or I have, that when we had an absolute warranty deed of a strip of land through a man's farm we had the fee and could dispose of it afterwards.

Q. But is that fee used for railroad purposes, or is the mere easement in the land used for railroad purposes?

A. The land is bought, outright.

Q. Well, do you think you are entitled to more rates where you own the land than you are where you condemn it?

A. I can't say as to that.

Q. You didn't take that into consideration?

A. No, sir.

Q. Did you consider at all the fact that your railroad was a highway and not a private enterprise?

A. I don't think I took that into consideration at all, General.

Q. Did you take into consideration the fact that the land used for the right-of-way of your railroad could not be sold for any other purpose, that it is devoted to a public purpose?

A. Where we have absolute deeds for the right-of-way we have sometimes sold it for other purposes.

Q. You have sold it for purposes inconsistent with its use for a highway, have you?

A. Yes, sir. We have sold it back to the land owners and they have leveled it down and made it a part of their farms again.

Q. Not the part occupied by your railroad?

A. Yes, sir, where the railroad was changed to some other location—we have instances of that kind.

Q. Well, where the railroad is changed to some other location it has got to be done by public consent, hasn't it?

A. Yes, by having the charter amended so that they can change their location; but where they change to eliminate curves or grades they often do move it say a quarter of a mile or a mile or two miles from what the location originally was; that is done quite often.

Q. Well, did you know that the State had a right to say whether you should do that or not?

A. Well, I don't think I took it into consideration in making up this appraisal.

Q. Well, where you do not own the land and your railroad is changed by straightening a curve or something of that kind, the land reverts, of course, to the owner of the fee.

A. Where it is condemned or where we have only an easemnt for railroad purposes, yes.

Q. But you have proceeded on the theory, have you, that you have better rights in the land where you own the fee, that is, that you have better rights, as a railroad, growing out of

the ownership of the fee of the land than you would have if you acquired only the easement to construct the railroad over it?

A. Yes, I think we have.

Q. And that is the reason, is it, why you buy land wherever you can, without resorting to condemnation proceedings?

A. Yes, we want to have the fee wherever we can get it.

Q. And that is because you think that gives you superior rights?

A. Well, it gives us absolute right to the land where we would only have an easement or a right to the use of the land in the other case.

Q. Does it give you any superior rights, in your estimation, as to rates?

A. I can't say as to that.

Q. Did you ever undertake to estimate the value of any other public highway besides that of this railway?

A. No, I can't say that we have. We have sometimes made changes in public highways, and have had to pay the land owners for the land upon which the new highway was constructed, and we have to pay, in those cases, about as we would for a railroad right-of-way——more than the average value of the land adjoining.

Q. Do you think in estimating the value of a building, such as the one we are now occupying, that you would take into account the value of the adjacent streets?

A. No, sir, that would have nothing to do with the value of the building itself.

Q. The owner of this building has just the same right in the adjacent streets that a railroad company has on its right-of-way, has he not?

A. But in making an estimate of the cost of reproduction of the building you would not take that into consideration—I would not.

Q. No, I never heard of its being taken into consideration, I never heard of its being taken into consideration before this method of reproducing railroads was first suggested. If it were a fact, Mr. Hayden, that the property that you are asked to estimate the market value of is in a position where it could not be sold, then is there any way in which you can ascertain a market value for it? That is, what I mean by that is, could not be sold for any ordinary business purpose.

A. I cannot conceive of any situation of that kind.

Q. Do you think the right-of-way of a railroad is salable for ordinary business purposes?

A. No, sir; not the country right-of-way, at least.

Mr. How: It has no market value and therefore it is not worth anything.

Attorney General YOUNG: It has the market value as the street upon which your beautiful house is located, it is not for sale.

Q. Now, Mr. Hayden, in answering the questions submitted to you by the engineer employed by the state railway commission, you undertook to give the values of certain properties upon which your railroad is located; that is, of the right-of-way and yards and terminals, did you not?

A. Yes, sir.

Q. Is that the same value which you give in these exhibits?

A. No, the value given in this exhibit is less, outside of the terminals of St. Paul, Minneapolis and Duluth, than that returned to the engineer for the state railroad and warehouse commission.

Q. And it is a good deal more on the terminals, isn't it?

A. No, sir, just the same, I think; I don't think any change was made on the terminals.

Q. How did you come to change the valuations of any of your properties between the two sets of exhibits?

A. As I explained this morning, the first statement was

gotten out in more or less of a hurry and with only just such time as we could give to the appraisal from other work. We employed no extra men and did not take any exclusive time to it, and when I discovered the errors, or rather the state engineer discovered the errors in some of the computations, I determined to make up a complete new statement for him, and for that purpose I got blanks from Mr. Morgan last summer and did make up a new estimate, based on the same figures, but on the corrested areas as checked up by Mr. Morgan.

Q. Mr. Morgan took the areas from the records, did he not?

A. Well, we both took them from the right-of-way records, yes, sir.

Q. Well, his areas did not agree with yours, and you took his ultimately, did you not?

A. Well, no, we took the right-of-way records and went over them together—his men and our men.

Q. The errors were in your returns?

A. In our first return, yes. sir. But in preparing this new return I found that by giving it more time and attention and more care I had overestimated some of the country station grounds, and some places I didn't have high enough, and that I could by taking more time and care and giving it personal attention make a better return, more uniform and more accurate, and that I have done.

Q. The return which you made, then, was not taken from any record in your office, so far as value was concerned?

A. Not as far as value is concerned, no, sir.

Q. Neither are these exhibits?

A. Not from any records in our office, no, sir.

Q. There would be nothing to prevent you from changing either one of them at any time, would there and justifying the change by simply saying that you had changed your opinion?

A. If in giving it more time and attention and going out again and going more thoroughly into the details I found places

where I could change, I think I would be justified in doing it, in order to get it accurate—as accurate as it possibly could be made.

Adjourned until the morning of Tuesday, March 23, 1909.

Federal Building St. Paul. Minn.. Tuesday, March 23, 1909. The hearing was resumed at 10 A. M.

CHARLES HAYDEN,
recalled.

CROSS-EXAMINATION (resumed).

By Attorney General YOUNG:

Q. Some of the changes in valuations that you had made in the exhibits used in this case, wherein the estimates differ from the return made by you to the engineer of the railway commission, were made after the testimony was given in the Northern Pacific case, were they not?

A. Some were, yes, sir.

Q. Testimony was given in that case upon values at points that were reached by both roads?

A. I believe so.

Q. And you have actually made changes in your valuations amounting to two and three hundred per cent in places, haven't you, since that testimony was given?

A. I think it amounts to that in some places, yes.

Q. You have not changed all your values that much have you?

A. No, sir.

Q. Have you changed your values in any place except where the State proved, in the Northern Pacific case, that your valuation was away out of proportion?

A. Well, I can't answer that, General; I of course have not got the details of the Northern Pacific figures. I have the State's figures.

Q. You heard the testimony, did you not, on value in the Northern Pacific case?

A. Only a small part of it.

Q. You had access to the transcripts of the testimony, didn't you?

A. Yes, sir.

Q. Now, I understand you to say that, so far as the right-of-way in country villages is concerned, you wrote letters to your agents at the various country stations and asked them the value of lots adjacent to your right-of-way?

A. I did in the first place, yes, in making up the return to the state railroad and warehouse commission.

Q. Well, you used the multiple of 3, did you not, in making your valuation that you now introduce here?

A. On some I did and on some I have gone to those villages or towns since that time, personally, and made my own examinations.

Q. Are your present valuations based upon your own observations, or upon information obtained from others?

A. Partly on my own observation and partly upon those of others. I have not been able to get to every town on the line in the state.

Q. Would you have any means of knowing what the value of real estate was in a town simply because you visited it, that is, knowing it of your own knowledge?

A. Only so far as I obtained from the records at the county seats and from inquiry among the people who were living there and who were trading in real estate, and bankers, who are supposed to know the values of town lots. In some towns I have myself a pretty fair idea of what those are.

Q. But, as a matter of fact, as a general proposition, your information as to the values of land in the villages along the line of your road would have to depend very largely, would it not, on information received from those who live there?

A. Yes, sir, for the reason that conditions are constantly changing; what might be true of this year would not be true of ten years ago or five or ten years from now.

Q. So you would have no personal opinion as to the value of lands in the various villages, upon which this Court could rely?

A. Only so far as I obtained it from investigation and inquiry on the ground.

Q. Did you go to the public records and examine the prices paid in transfers of lands?

A. In some cases.

Q. What cases?

A. In the case of Barnesville, in the case of Benson, in the case of St. Cloud,—I can't recall all the cases, General.

Q. And your examination of the records in those particular cases was confined to an investigation of the value of the city property, was it?

A. In those cases, yes, sir.

Q. How extensive an examination did you make?

A. Well, I took a range of probably three or four years prior to the time that I was there, recent transfers. I didn't make any tabulated statement of it, but just for the purpose of confirming what I knew I ascertained from people who were living at those places.

Q. You did not fix your values upon that information?

A. Only to a certain extent. That was one of the elements.

Q. And you don't recall now any other places than Barnesville, Benson and St. Cloud where you did that?

A. I think at Moorhead, also.

Q. Well, do you know?

A. Yes.

Q. Did you make the examination yourself?

A. Yes, sir.

Q. How much time did you spend at it?

A. I think I was in Moorhead all of one day looking at the records there.

Q. You did not, as a part of your system of valuation, though, send anybody to the other places or make this investigation of the records and transfers really any part of your system of valuation?

A. Not any uniform part of it, no, sir.

Q. Well, having made up your mind what the value of adjacent property was in any given village or city along your line (speaking now of the small cities) what next did you do toward fixing the value of the railroad right-of-way?

A. Then I estimated the character of the improvements adjacent to our right-of-way and how much of the station ground was within the limits of platted property and how much outside, and divided up the station grounds into so many town lots, where they were platted, and so much an acre outside of the platting, and estimated what in my judgment it would cost to buy that right-of-way if we had to purchase it, as of that time.

Q. Did you in any case take into consideration what the right-of-way had cost and what it had cost the company, in any particular locality?

A. Only in very recent cases. That is, at Cloquet I took into consideration what it had cost us for rearranging our tracks there.

Mr. HOW: You mean cases of recent purchase?

WITNESS: Yes, sir. And in the city of Virginia—any place where we had, within very recent years, obtained any right-of-way, I used that as one of the elements to determine the present value.

Q. It was not at all controlling, it was just simply one of the elements?

A. No, sir, just one of the elements.

Q. What did your company do at Cloquet recently that

would enable you to use that as a basis for your computation in that city?

A. About four years ago, I think it was, we made a rearrangement of our tracks through the town or city of Cloquet, and straightened out some curves and made a new yard there, in which the Northern Pacific were to be considered as well as ourselves, so as to make a straight yard, with the Northern Pacific on one side and ourselves on the other in the same strip of land. We had purchased from the Weyerhaeuser interests (the Northern Lumber Company, I think it is) certain land for that rearrangement of tracks, and we paid the Weyerhaeuser Company $25,000 for the land on which certain of those changes were made. We paid some other parties, also, besides the Weyerhaeuser Company, and we made an exchange with Johnson & Wentworth for some of their land, for land which we gave up in changing the tracks, and I based my estimate of value at Cloquet considerably on that fact—of what it had already cost us at that place.

Q. But you put the value higher?

A. Very little; for this reason, that the cost of this rearrangement was not the entire cost of the right-of-way through the town; we had already some right-of-way there before we started to make the change.

Q. The property which you acquired from the Weyerhaeuser people at Cloquet at that time was acquired by voluntary purchase of it, or by condemnation?

A. A voluntary purchase.

Q. One of the Weyerhaeusers is a director in the Company?

A. Yes, sir.

Q. And one of the principal stockholders, is he not?

A. I couldn't say as to that, sir.

Q. There probably wasn't very much controversy over the value, was there; the price to be paid, rather?

A. We had either to pay the price or condemn; we paid the price.

Q. Do you know anything about whether any land in the city of Cloquet was selling at any such prices as you paid Weyerhaeuser for that land in controversy?

A. Not of my own knowledge, but I believe town lots were selling for more than that, considerably, in the town of Cloquet.

Q. If you have no knowledge of it you can't tell us. Do you know?

A. I don't know of my own knowledge, no, sir.

Q. You didn't make any inquiry as to what lots similarly situated were selling for at the time you made your estimate there?

A. Not at Cloquet, no, sir.

Q. You do know, do you not, or could ascertain from the records of the office, what the right-of-way at the city of Cloquet cost originally?

A. The records would show that.

Q. And the records would also show everything that the company has expended upon that right-of-way by way of betterments or permanent improvements?

A. The records of other departments would show that.

Q. Well, the records of the Company I am talking about.

A. Of the Company, yes.

Q. For work of this kind, of course you have access to the records of the other departments, where necessary?

A. Yes, sir.

Q. You did not consult those sources of information, did you?

A. Let me see if I understand your question, General. As to the records for the betterments, you mean for all betterments besides the right-of-way, the grading and the buildings and the tracks and those things?

Q. I tried to indicate to you that you had access to information as to what the right-of-way at that particular place originally cost and all sums that had been expended upon it by the

Company for improvements or betterments since it was acquired, and I asked you whether you had consulted those sources of information for the purpose of enabling you to judge of what the property was worth at the time that you were making this estimate of the cost of reproduction.

A. I did not, for the reason that—

Q. Never mind the reason.

Mr. HOLDEN: Well, I submit that he will mind the reason.

Attorney General YOUNG: He will? Well, can't you examine him?

Mr. HOLDEN: Well, I submit that the witness should be permitted to finish his answer without being chopped off in the middle of a word. He started to give his reasons.

The MASTER: Well, he has not been asked the reason. I suppose you can call that out on re-direct.

Mr. HOLDEN: But if the witness desires to state the reason, I think he has a right to make an explanation after he gives a categorical answer to the question, and I submit that it is a privilege of the witness to make his answer plain at the time he is giving his testimony.

Attorney General YOUNG: Well, I withdraw my objection. Let him give his reasons—I want the whole thing.

The MASTER: Very well; make your answer.

WITNESS: —for the reason that I did not, in making this estimate, take into consideration the question of cost anywhere except in very recent cases. The cost of right-of-way has had but little bearing on this valuation in getting at the figures.

Q. In your opinion the cost of right-of-way and the cost of improvements and betterments placed upon it by the Company are not a proper element to be considered in estimating the cost of reproduction?

A. I can't say as to the cost of the improvements to be placed upon the additional right-of-way, but as to the additional right-of-way I think that it should be taken as of a cer-

tain date—just as I have taken it—what I think it would cost, in my judgment, to buy it at that time, no matter what it has cost some time before, unless within a very recent date.

Q. Do you think, Mr. Hayden, that if you took the value of adjacent property at the time that the Company acquired its right-of-way, and found how much more than the ordinary value of adjacent property the Company had to pay for its right-of-way, and then ascertained how much adjacent property had increased in value since the acquisition of the right-of-way, you would have a proper basis or ratio to apply to the original right-of-way cost to ascertain its present value?

A. Possibly, but I didn't do it in that way.

Q. You didn't do it in that way,—it could be done in that way?

A. It might be done.

Q. That would be the way that ordinary property would be valued, would it not, if you were trying to ascertain its present value, ordinary real estate?

A. I don't know as to that; I can't say.

Q. In estimating the value of ordinary real estate upon which improvements have been made, the person making the estimate necessarily would want to know, would he not, what the original cost of the property was, and what its relative value was with regard to adjacent property at the time it was acquired, and what its relative value was with regard to the adjacent property now?

A. No, I think in making an estimate of that kind they would only take into consideration the value of the property at the time the estimate was made and the value of adjacent property at the time that the estimate was made.

Q. Railroad property is necessarily different in its essential nature from other real estate, for the reason that you mentioned in your testimony yesterday, that it costs somewhat more to acquire real property for railroad purposes than it

does to acquire it for ordinary business purposes; but, having acquired it and having the title to it, do you think that the ratio of increase in value as applied to railroad property is any greater, or ought to be any greater, than the ratio of increase in value of other property?

A. I think it depends largely on the conditions surrounding the particular tract which you are valuing.

Q. Well, I am speaking now about the principle of valuing it. As a general proposition in valuing the property what do you say about it?

A. That is a pretty hard question to answer. In wholesale districts the property advances and the railroad property advances in perhaps the same ratio; in a residence district it is not true, the railroad property depreciates in residence districts sometimes and the railroad property is not any less valuable for railroad purposes than it was at any time, it is just as valuable today as it ever will be, perhaps, for that particular purpose, and it is the highest use to which we can place that property.

Q. Use as a highway?

A. Use as a railroad right-of-way.

Q. Well, is it your theory, in valuing railroad property, that where adjacent property depreciates, the railroad property does not go down, but where adjacent property appreciates the railroad property goes up?

A. If you have to purchase you have to pay more for your railroad property, even in depreciated districts, for this reason: that as soon as you create a demand for a certain property the prices go up very fast, and where the railroad company has depreciated the property and interfered with sales for residence purposes, the property has depreciated and there is no sale for it until somebody wants it; as soon as you create a demand for it, then the prices go up again, and you have to pay.

Q. Well, but in this method of appraising railroad property or undertaking to ascertain its cost of reproduction, you are not creating a demand for any additional property, you don't intend to buy the property, you have already got it, haven't you?

A. Yes, but if you had to reproduce it—these estimates I have made are the estimated cost of reproducing that property.

Q. Do you want to tell us that in your theoretical scheme for reproduction you have taken into account the fact that your plan has created a demand for property in that vicinity?

A. If you want to buy a right-of-way you would create a demand for property.

Q. But you have the right-of-way already and you are not intending to buy any more. Now, where is the demand for the property involved?

A. We are supposing that this property is not there, that we have to reproduce it on that place.

Q. And you are therefore creating a demand for additional property, are you?

A. Certainly, we create a demand for that particular property, yes.

Q. Isn't this the particular property that you are valuing and ultimately intend to use the property you have already got?

A. Yes, but you could not buy that on the basis of the value of adjoining lots as they stand today; if you wanted to buy it you wouldn't get it on the value of adjoining lots.

Q. But you have already told us that you have applied a multiple to it of 300 per cent.

A. Not in the cities, no, sir.

Q. Well, in every locality you have applied a multiple of increase to cover the difference between the cost of acquiring the property for ordinary purposes and the cost of acquiring it for railroad purposes?

A. I wouldn't say it was a multiple, I would say it was an additional amount to be added to the value of the adjacent property, to the value of reproducing it as railroad property.

Q. In the rural districts you call it a multiple of 3, and in the cities you use an arbitrary, do you?

A. Well, it is really an accident that we use the multiple of 3, because at this particular time and in this particular state, with this system of reproduction, it amounts to about 3, but it might not amount to that in some other years and some other location or with some other road.

Q. You didn't answer my question as to whether in making this kind of an appraisal of the cost of reproduction you would diminish the property of the railroad where adjacent property had depreciated, or whether you would increase its value whether the adjacent property had depreciated or not.

A. You are speaking now of the country towns and villages only?

Q. I think you undertsand the question.

A. I would like to have that question again because it makes a difference in the answer.

Q. You stated that it often happens that the building of a railroad through a residence district in a municipality depreciates the property, but that in the wholesale district of a city it enhances the value of adjacent property. I assume that to be true, and so assuming, I want you to state whether, under this sort of a scheme of appraisement, you would lower the value of your railroad property in localities where the adjacent property has depreciated, and raise it in localities where adjacent property has become enhanced in value, or whether your plan contemplates raising the value in all localities without regard to whether adjacent property has increased or diminished in value since the railroad was constructed.

A. I don't think it is proper to say to raise or lower the values of railroad property, but we are making a value of the

property which we think it would cost us to buy it at a certain time. Now, in districts where the railroad has depreciated the value of residence lots, it would not cost as much in proportion or in actual figures as it would in districts where the property has been enhanced in value.

The last question was here read to the witness.

Q. Have you any objection to answering the question as asked as to what your plan is?

A. I don't think I can answer it any better, General, than I have. I have tried to answer it.

Q. What do you mean by that answer? Just explain the answer; perhaps that might do. You understand the question, do you not?

A. Well, I thought I did.

Q. I am speaking about your plan of procedure; I would like to have you explain it, I don't fully understand it. As your railroad passes through a municipality you find that it passes through a business district and a residence district; the building of a road through the residence district has depreciated the value of adjacent property; it may have enhanced the value of business property, especially wholesale business property; what rule do you apply in those cases?

A. I think the rule is the same in either class of property, that you take the value as you find it at that time and add your increases according to your judgment of what you think it would cost to reproduce it at that time.

Q. Have you in any case, Mr. Hayden, returned here as the cost of reproduction a less sum than the right-of-way originally cost?

A. I can't say as to that. I don't think so, but I have not gone into the cost of right-of-way, General, as I have stated before.

Q. You have not, then, followed the rule which you now tell us would be a proper rule, have you, and returned the rail-

road property at less than the cost where adjacent property was depreciated in value at the time you made the estimate?

A. Well, I will have to give you the same answer, that I have not taken into consideration the cost of right-of-way at any place unless very recent purchases.

Q. Why didn't you take into account the cost? Were you afraid that would give you some information more definite than what you are giving us here?

A. No, but I didn't consider that the cost had much if any bearing on the value of the property at this time.

Q. Did anybody instruct you to not take the cost into account?

A. No, sir.

Q. Did your counsel advise you that the Supreme Court of the United States has said that the cost of the property was a proper element to consider in estimating its value?

A. Didn't say so to me, no, sir.

Q. Irrespective of any declaration by the Supreme Court of the United States on the question, were you not aware, Mr. Hayden, that that was an elementary principle in valuing property—to ascertain what it cost?

A. I did not give that consideration, General.

Q. Well, is there any reason why you are afraid to let us know the cost of your right-of-way and terminals in this state?

A. I don't think we have said we were afraid to let you know.

Q. Well, why did you fight so shy of the cost of these things in making your estimate?

Mr. HOLDEN: Well, if your Honor please, I object to the insinuation contained in the question and in several of the recent questions. It is not fair to say that a witness is "fight ing shy" of any element in the case, it is an unfair imputation to put upon the record. It is perfectly clear from his testimony that he did give consideration to the cost within any

reasonably recent period and that costs of twenty or thirty years ago no sensible man would pay much attention to. I submit that the testimony of the witness is perfectly clear, and it is highly improper to put upon the record insinuations of that kind; there is no justification for attacking the character or the method pursued of this witness.

Attorney General YOUNG: I am not attacking his character, but I assume that his method is subject to attack.

Mr. HOLDEN: Well, there is a proper way to attack it, then.

Mr. O'BRIEN: Is it his method or is it your method as you said yesterday? Of course, if it is your method, the mere reiteration that there is no reason for attacking it—

Mr. HOLDEN: You may attack me all you please, but I submit it is not a proper thing to fill the record with that class of thing.

Mr. O'BRIEN: There is nothing secret about it whether it is yours or his?

Mr. HOLDEN: There is nothing secret about it at all.

Mr. HOW: Let me suggest that the course of the examination leaves out of sight the object of the witness's testimony. The ultimate fact for the Master to find is the value of the property; this witness is not testifying to that ultimate fact, he is testifying to one element for the Master to consider in determining that ultimate fact, and that is the present cost of acquisition of the property. He has not testified to the original cost. Now, if that shall be considered a necessary element, it devolves upon us to establish it.

The MASTER: Well, the defendants here are assuming in this examination that the original cost has something to do with the present value, and upon that assumption they are trying to call out from the witness, if he can state, why he did not use it and why it is not a proper thing to be used.

Mr. HOW: But I don't want the Master to understand that this witness is testifying to the present value, he is testifying to

the present cost of construction.

The MASTER: That is true; he has answered the question, but the defendants are trying to find out whether when his attention was called to these matters he has taken in all the elements he ought to have taken in to ascertain the present value.

Mr. HOW: If the question is asked him whether or not he considered the original cost in determining, or in assisting him to determine, what the present cost of acquisition is, I think it is fair; but if the question is asked him whether he determined the original cost or ascertained it in order to enable him to determine the present value, it is unfair, because he has not testified to the present value.

The MASTER: Well, counsel wants to find out from the witness, when his attention is called to that matter, whether it was not a proper thing to have been taken into consideration and whether there is not some element missing in the basis upon which he predicates a value.

Mr. HOW: He does not predicate value. May I suggest that again? He predicates his whole statement upon the present cost of acquisition.

The MASTER: Yes, I understand.

Mr. HOW: That is all he testifies to.

The MASTER: Yes, I understand.

Mr. HOW: We are not going to be satisfied with his figures in regard to the present value.

The MASTER: That is what he has testified to, he has testified that he considers that is the present value. Of course, I do not suppose the General intends to insinuate that the witness is not fair.

Attorney General YOUNG: No, there is nothing of that kind intended, I am attacking the system. I desire to say, right now, that I am not insinuating anything in reference to the witness's veracity, but I am trying to find out why this particular system was adhered to.

The MASTER: You may proceed, General.

Q. Why did you refrain, Mr. Hayden, from examining and familiarizing yourself with the original cost of these various parts of the right-of-way and terminals and the amount of money that may have been expended upon them for permanent improvements and betterments before ultimately determining in your own mind the alleged cost of reproduction?

A. In the experience which I have had in the departments I knew, of my own knowledge, the cost of a great many lines of road and of the different items we purchased from time to time for additions and improvements, I had all those things in my mind to a certain extent; I did not go and make any systematic search of the records in every case.

Q. You don't pretend to tell us you carry in your mind the cost of each particular part of the property acquired by your road for right-of-way and terminals?

A. No, sir.

Q. And in order to get that into your mind you would have to consult the records and refresh your recollection, even though it related to instances where you had yourself done the purchasing?

A. Yes, and that I did to a certain extent, but not as a system.

Q. And did you use that information at all in ascertaining or making up your mind as to the cost of reproduction?

A. Yes, that had a bearing on the appraisal.

Q. I understood you to say a while ago that it didn't.

A. Well, I thought you meant as a general thing, as to the cost of the entire property, or anything of that kind.

Q. Now, then, make it plain to us just to what extent you considered that it is a fair element in making up your mind on this kind of an appraisement, so that we will understand each other.

A. Well, I think it is only fair where the purchases have

been made within recent years so that they would have a bearing on the present value.

Q. How recent?

A. Well, say within five or eight years, something of that kind. I don't know that I had any special time in mind.

Q. Well, then, we get back to the proposition that so far as the right-of-way and terminals are concerned that were acquired more than eight years ago, you did not consider at all the cost of the acquisition of the property by the Company, nor the amount that had been expended by the Company on improvements or betterments?

A. That is a general statement which I believe is correct.

Q. That is correct; now we understand each other. As a matter of fact, your Company has a complete record, I think you stated, of all these elements of cost, so that you could have ascertained?

A. They have an accurate record of all the costs of every piece of right-of-way that has been obtained, yes, sir.

Q. You mentioned, a moment ago, another matter about which I did not get a very definite understanding, and I would like to ask you again, not desiring to have any repetition, but in order to clear the matter up,—in estimating the cost of reproduction through a municipality, I think you stated that you took into account the increased demand for property that would result from the proposed acquisition of the right-of-way; am I right about that?

A. Yes, sir.

Q. Well, now, just to what extent did you take that element into consideration in fixing these values?

A. It would be pretty hard to measure, and yet it has a very considerable bearing on the question of cost to acquire at this time.

Q. In other words, you undertook to ascertain what the value of adjacent property, suitable for use as right-of-way, was

at the time that you were making the estimate with the railroad in existence?

A. Yes, sir.

Q. You then, by a mental process, put the railroad out of existence, converted the right-of-way into business property, theoretically, and assumed that it was of equal value with adjacent property for business purposes, and then you took into account the fact that a certain amount of that property equal to the amount now used for right-of-way was necessary for right-of-way of a railroad?

A. That is correct.

Q. And that is the basis upon which you undertook to estimate the cost to the Company of acquiring it?

A. Yes, sir, that is correct.

Q. So that the ordinary value of the adjacent property, with the railroad in existence, was not the real basis, then, for the computation of the cost of acquiring the right-of-way; there was added to that the suppositious increase in value which would result from the creation of a demand for the amount of property that would be necessary for the right-of-way?

A. Yes, sir.

Q. Now, can you give us any idea of just how much you enhanced the then value of the property adjacent to the railroad by reason of that supposed demand?

A. That difference between the value of the property with the railroad there and the value of the property which we would have to add in order to acquire it for railroad purposes varies considerably with almost every town or village or city in which you go, according to the particular localities through which you run and the condition which you find.

Q. Well, did you have any fixed theory as to the proportion of—any certain designated value that should be added on account of this supposed demand for property that would arise in the way that you have stated?

A. No fixed definite percentage, it was just a matter of judgment on my part.

Q. But you did add actual valuation and an arbitrary increase of such sum as you thought would be fair?

A. Yes, sir.

Q. And would result from the immediate demand for that amount of property?

A. Yes, sir.

Q. If it should arise?

A. Yes, sir.

Q. You said, I believe, that you applied the multiple of 3 to the actual value in order to get at railroad value only in the strictly rural districts and not in municipalities; is that true?

A. That applies to the smaller country station grounds as well. I used a multiple sometimes as high as 3 and sometimes not so high, but never any higher than that in the country station grounds.

Q. And you cannot give us now, of course, the exact multiple that you applied in any particular place?

A. Oh, no, because it varies almost in every place.

Q. But I think you stated yesterday (and we had accepted it as true) that the average multiple you used was 3?

A. In the rural right-of-way the average amounts to about 3, yes.

Q. That multiple, you say, is applied not only to strictly rural property but also to property within the villages along your right-of-way?

A. Well, in the smaller places where there is very little settlement.

Q. How large would a place have to be before it was excluded from the application of that rule?

A. It would depend a good deal upon the nature of the settlement around the track. Where the settlement was back away from the railroad some little distance, and we valued the

station grounds not much if any more than the farm land, we used about the average of 3 in those places. Where the towns were say of one or two hundred people and came down pretty close to the track, so that there would be improvements, theoretically, upon that strip if we were not there, we did not use a large multiple, because we used a higher rate to start with.

Q. Well, in every case where the multiple was used, the basis to which it was applied was the actual value of the property plus the additional value that would result from the immediate demand for the acquisition of the amount of land necessary for the right-of-way?

A. Yes, sir, as nearly as I could determine.

Q. And you could not give any definite idea as to just the increase you would apply because of that supposed demand?

A. I can't tell you off-hand, but the detailed sheets there all show for that as to what the differences are.

Q. Have you here a column showing the actual market value with the railroad there, and the market value at it would be if the railroad were eliminated and there was a demand for a sufficient amount of land to make up the right-of-way of the railroad?

A. Well, that is in effect pretty nearly what that amounts to there; that is, the market value as I state there is about the value of the land adjacent to the railroad, either in the towns or out through the country, and the right-of-way column shows the price which I think it would cost the Company to acquire it as of the date of June 30, 1908.

Q. Well, the cost column is the column to which you have applied the multiple to which you refer?

A. That is the railroad value column.

Q. The railroad value column?

A. Yes, sir.

Q. What I want to get at is how are we to ascertain the difference between the fair market value of adjacent property

in any particular town and the value which you gave to it in this imaginary conception of the immediate necessity for the acquisition of land for right-of-way through it.

A. Well, I don't see how you could, except by examining those detail sheets to see.

Q. Can you tell anything about it by these detailed sheets?

A. The difference which I estimate as between the market value and the right-of-way value?

Q. No. Now, Mr. Hayden, you have told us that before you applied your railroad multiple so as to give the railroad value of property as distinguished from its value for other purposes, you have added to what you believed to be the market value for ordinary purposes some additional amount, the exact amount of which you have not disclosed, which you believed ought to be added because of a theoretical increase in value that would result from the necessity of acquiring the right-of-way for a railroad, after you had first supposed the railroad to be out of existence?

A. I think before we go further I should state here that in all cases, as I stated yesterday, I have taken the right-of-way value as the basis from which I worked; that is, I have taken in all these cases what I estimated, from all the information I could obtain from all sources, what I thought it would cost us to acquire a right-of-way through the country districts and through the cities and towns and villages, and then from that I have put it in that column as the market value; and I have not used a percentage, as I stated, from the actual real estate value to produce my right-of-way value, that is a matter of judgment of the right-of-way with me.

Q. You want to tell us, do you, that you estimated the cost of your right-of-way entirely regardless of the market value of the adjacent property?

A. No, sir.

Q. Well, what do you mean?

A. I mean that I took that into consideration as well as other elements.

Q. You have just told us that you fixed the market value by dividing your right-of-way value by 3; is that true?

A. That is true.

Q. Well, how did you get your right-of-way value?

A. By going out and ascertaining, in a general way, what farms were worth, what the improvements were, what the nature of the country was through which we run, whether it was a flat country or a rough country, whether we cut it diagonally or how we did cut it and how we went, near improvements or otherwise, and then I estimated what it would cost us to get right-of-way per mile or per quarter through a country of that kind.

Q. Well, would not the amount that it would cost you to acquire right-of-way depend entirely upon the market value of the property through which you were passing?

A. Not entirely, no. Somewhat, though.

Q. Do you mean to say that you start with some arbitrary value up in the air somewhere above this property and you figure down to get its actual value, or do you start at the bottom and find out what its market value is and then add to that the additional sum it will cost you for right-of-way?

A. Well, of course I don't go out and say that right-of-way is going to cost a hundred dollars a mile or a thousand dollars a mile, but I have to have some reason for thinking that.

Q. Well, now, don't you start out, Mr. Hayden, with the value of the property through which you pass and then add to that the additional amount which you think it will cost you to acquire it for railroad purposes?

A. Not as a rule, General, no. It is pretty hard to explain, perhaps, just how I do get at it.

Q. Well, I certainly don't understand how you get at it. It may be that you know and it may be that the Court under-

stands, but I don't. I don't think you have any definite knowledge as to what property is worth, have you?

A. No, sir.

Q. Well, then, in order to find out what it is worth, don't you have to ascertain its market value as a starting point?

A. Yes, I think you should.

Q. Then if you want to acquire that property for railroad purposes you add to the market value of the property for ordinary purposes the additional sum that you think it will cost your Company to acquire it for railroad purposes, which includes the severance of the property from its surroundings and all of those things that go in to make up the railroad value of property for right-of-way, don't you?

A. I can explain that by saying this: Supposing we are sent out to buy a right-of-way on a new line, we go out there and we ascertain, in a general way, what the farms are worth an acre; we go to a man and say, "I want to buy a right-of-way through your farm, and how much is your farm worth an acre?" He says, "That don't have anything to do with it, I don't want to sell my farm, if you want a right-of-way through there you will pay me so much." Well, the land value has very little to do with it.

Q. You don't have to pay what a man asks?

Mr. HOLDEN: Finish your answer.

WITNESS: It has very little to do with the value of his land as farm land if the damages are great, it is what we have to pay for that right-of-way in that particular case, and that is what we find all along in these figures—what I think it would cost us under all of the circumstances. Of course, farm-land value has a bearing, and a very great bearing, and so has town-lot value.

Q. Do you go out when acquiring right-of-way and pay every man whatever he asks you for his land?

A. We pay him pretty nearly what he asks unless he gets

so high that we feel we cannot, in all conscience, go so high, and then we condemn.

Q. You have a right to condemn in all cases, of course?

A. Yes, sir.

Q. And that is the only means you have of being absolutely certain that you can acquire the right-of-way?

A. Yes, sir.

Q. Now, you did say yesterday, and you repeated it today, that in your experience the multiple which should be used to indicate the added cost of property for railroad purposes over its cost for ordinary purposes, was the multiple of 3, and that that was founded, you said, I think, on your experience and observation; is that true or is it not true?

A. Well, that is true in the state of Minnesota of this system of railroads at this time.

Q. Now, let us start out with the proposition that that is true, and, being true, of course we care nothing about what you pay in individual cases, because you have stated that the average of your experience shows that the ratio of 3 is about the fair ratio and the actual ratio; now, what I want to get at is, when you start out to make this estimate in which you intend to use that ratio, do you not necessarily start with the market value of the property in every case?

A. Not in every case, no, sir.

The MASTER: May I ask, didn't you use a multiple of 3 or some lesser multiple in making up these statements which have been presented here?

WITNESS: Yes, sir, I did.

Q. Well, what is that multiple applied to, the fair market value of the property for other purposes, or to your mere guess of what it is worth?

A. Well, the fair market value of the property for any other purpose except a railroad; but as I stated before, and I want to state again, I have not gone and ascertained from the

records or from other sources the average value of farm land per acre and of town lots or in smaller villages and then added a uniform multiple of 3 to produce the right-of-way value; I have not done that. The detailed sheets show that also.

Q. Have you used any system that has in it the element of uniformity?

A. This has almost the element of uniformity; that is, it is pretty close to an average of 3; that is the way it works out.

Q. Well, I would like to know, once for all, whether you start out with a guess as to what property will cost when you take into account the railroad value of a right-of-way, whether you apply to that your guess as to what it would cost the Company, or whether you start out on some definite basis. Let us have that out, once for all,—what do you do?

A. I think any estimate is a guess in a certain sense, General, it can't be anything else than a guess, it is a guess made on your best judgment, from all the details you can ascertain and from your experience—everything that goes to make up experience in acquiring a right-of-way.

Q. Well, do you make your guesses without regard to the market value of property?

A. No, sir.

Q. Do you take market value as your basis for computation, or do you not?

A. Only as one of the large elements for that computation.

Q. What relation do these values that appear in your estimate here, Ex. 10, have to the market value of the property, if any; have they any?

A. Well, they have relation, yes, sir.

Q. What is it?

A. The relation is this, that I have given there, as nearly as I can ascertain, what the market value is of lands and lots in various parts of our system.

Q. You don't undertake to make market value or to fix arbi-

trary values and then figure down to a value which you declare to be the market value, do you?

A. No, sir.

Q. But you do build up from the market value to the railroad value, do you not?

A. You do to a certain extent, yes; that is one of the large elements in getting at what I estimate to be the cost of acquiring the property at this time.

Q. To go back to your statement of a moment ago, you say that the first thing you do, if you go out to buy a piece of right-of-way, through the country, is to go to the owners of the land in the vicinity and find out what land is worth there?

A. Yes, sir.

Q. What do you do that for?

A. Well, I think a person would be very foolish to go to buying property without knowing what property is reasonably worth—

Q. You go to them—

A. —as farm land or as town lots. How would you know you were paying too much or too little or what you should give?

Q. That is just what I am trying to get at. You ascertain that in order to have a primary basis upon which to work?

A. Certainly.

Q. And it is upon that primary basis that you proceed, from that point until the right-of-way is acquired, is it not?

A. Well, we use that as a sort of a basis to know whether we are getting a right-of-way for what we consider is a reasonable amount or not.

Q. Well, what do you consider a reasonable amount for a right-of-way after having ascertained what the property is worth?

A. Why, it depends a great deal on circumstances. If we have to get right-of-way in a hurry, as we often do if the con-

tractors are on our backs, we have to pay a whole lot more than we think it is worth.

Q. Now, in estimating this cost of reproduction did you consider that you would have to build the road in a hurry or build it slowly? I would like to find out upon what theory you proceeded in this matter.

A. Well, we take it that we would have time in which to acquire the right-of-way in this estimate.

Q. Now, suppose that in passing through a country you ascertain upon inquiry that the land is worth $25 an acre for farming purposes, what would you consider would be the fair cost to the Company of acquiring right-of-way through that land?

A. I think in most places in Minnesota from two and one-half to four times would not be excessive.

Q. Well, what do you think would be the average?

A. I think it would be very close to three times in Minnesota today.

Q. Now, you know, do you not, Mr. Hayden, that in a theoretical estimate of this kind, you must assume some average ratio to be guided by of additional cost for railroad property over ordinary cost of the same property? You must assume some fair average ratio, must you not?

A. Yes; we have done so.

Q. And what multiple was it that you adopted?

A. Well, it is pretty close to the multiple of 3; it averages that.

Q. Well, now we have got to a basis where we were several times before and from which you seem to invariably depart as soon as I undertake to question you.

Mr. HOLDEN: Isn't the difficulty with your conception of his testimony, General? I object to filling up the record with these comments of General Young reflecting upon this testimony. Now, that is a fair matter of comment in an argu-

ment, but to constantly be injecting into this record that the witness is varying his testimony is highly improper, and I submit again that these voluntary comments by counsel are not an orderly way of conducting this examination. He may have them in his mind and may reserve them for argument to your Honor, but it is not proper to be constantly attacking this witness and filling this record with that kind of matter.

Attorney General YOUNG: If you can understand this witness, you beat me.

Mr. HOLDEN: Well, I undertake to say I can; but if you can't, I undertake to say that it is perhaps a reflection on your part in this case.

Attorney General YOUNG: I am very sorry I have not the capacity of understanding it; I am simply an ordinary mortal and I would like to have this testimony clear.

The MASTER: I think the question asked by you, General, was proper.

Q. I started out a short time ago, Mr. Hayden, when we digressed, in order to get at some definite information; I asked you whether you applied this multiple of yours to the actual market value of the property after you had ascertained its actual market value, or whether you applied it to some other value than the market value; that is, whether you had added to the market value some additional value as a so-called railroad value before you applied the multiple.

A. Not before I applied the multiple, no.

Q. But before applying the multiple, you took into account the fact that there was this imaginary demand for land, which did not exist in fact?

A. No, I did not; because the market value in that column represents what the land is selling for for other purposes at the present time with the railroad there.

Q. How is that?

A. What the land is selling for for other purposes with the

railroad on it or adjacent to it.

Q. And that, in all cases, was the basis to which you applied your multiple, was it?

A. Well, that is the basis which I have used there as the column for market value.

The MASTER: When you used the multiple, that was the basis upon which it was used, do I understand?

WITNESS: Yes, sir.

The MASTER: In other words, you determine in your own mind, from inquiry, what the value of the land was for purposes generally, not for railroad purposes, but generally, farming purposes or any purposes for which it was adapted, and that was the basis, and then whenever you did make use of the multiple it was upon that basis; is that right?

WITNESS: That is correct, yes, sir.

Q. I think you said, Mr. Hayden, that in making this estimate, when you went into a rural town, as I might call it, (a small town in the country), or when you went along your right-of-way, before you made this estimate you took notes of the buildings and improvements that existed on the land adjacent to the right-of-way and took into account the fact that those improvements would have to be purchased with the adjacent land if the Company were compelled to acquire that land for right-of-way, and that, in other words, you took the value of that adjacent land with all of its improvements, as the market value which would determine the value of the right-of-way, for business purposes?

A. Yes, that is true; I take land that is improved as worth so much an acre including the improvements, certainly.

Q. And in villages, for instance, where buildings have been erected along the right-of-way, and the adjacent property considerably improved, in ascertaining the market value of that adjacent property you counted in the value of those buildings and improvements?

A. Yes, sir.

Q. Entirely regardless of the fact that those buildings may have been erected there solely because the railroad was there?

A. I don't know that I took into consideration the reason for the buildings being there, but I took into consideration the fact that they were there, that those lots were improved, and that if the railroad was not there I assumed that the railroad strip would be improved and somewhat in a similar manner from adjacent property.

Q. I see. So that the market value of the adjacent property was not its value as land without improvements, but its value with all improvements situated thereon?

A. Well, I took the market value of the land alone, but the railroad value includes the value which we would have to pay in addition to the land value for buildings or improvements destroyed or removed.

Q. And did you apply your multiple to the market value of the land with the improvements, or to the market value of the land without the improvements?

A. I think, to be entirely honest, we take that because we figure in this way: That where we have right-of-way running through a settled country where there are buildings and improvements, that those farms sell for a lump sum, which includes all those improvements. That makes a value per acre of that particular farm or that particular territory through which we are to run that right-of-way, and that is about the basis on which we would apply a multiple, either of three or whatever it happens to be.

Q. That is the basis upon which the multiple is applied?

A. Yes, sir, because there is no way that I know of to separate the value of improvements from the value of the land in any transfers or in any estimate of the property without going to a very considerable detail which would involve an enormous amount of time.

Q. And that plan is followed entirely regardless of the fact

that those improvements were all erected after the railroad was actually built and because of the railroad's existence.

A. Well, I simply took it as I found it on that date, whether they had been placed there because of the railroad or not.

Q. Now, I want to call your attention again to the instances where you say that the building of the road had depreciated the adjacent property; you did not, in such cases, put in the railroad property at less than it cost the Company because of the depreciation of adjacent property?

A. No, sir.

Q. You do not consider that such a course would be fair to the Company, do you?

A. No, I estimate through that particular depreciated district what the property would probably cost us to reproduce as of this time.

Q. And you stated, I believe, that you considered the railroad value of the property for right-of-way purposes to be its highest value, and the highest function of the property?

A. Yes, I think that is true.

Q. What do you say about that?

A. Yes, I think that is true; I think that is the highest use to which it could be put.

Q. And the highest value that it commands for any purpose is the railroad value?

A. In a general way, yes, in a general sense.

Q. Except, perhaps, for another highway purpose; land for right-of-way of a railroad, as an original proposition, costs just the same, does it not, as similar land acquired for other highway purposes?

A. No, sir.

Q. It does not?

A. It does not.

Q. It costs more; it costs more for railroad purposes, does it?

A. Yes, sir.

Q. Is there any reason why with a railroad running diagonally through a man's farm you would have to pay more for the right-of-way than the public would have to pay for an ordinary highway running on that identical spot through the man's farm? along that identical line I should say.

A. Yes, sir; there are a great many reasons, General, why a right-of-way for a railway costs more; a right-of-way for a highway is something that a man may make use of himself for his own access to and from his buildings or his farm, and while it may cut his farm in two, it is no particular detriment to have that between the two portions of his farm. But with a railroad going through, there is the danger from the killing of cattle, stock, or danger to himself or his family, there is the noise and the smoke and the dust, and there is the matter of crossings which are dangerous. There are very many things that enter into the reason why you would have to pay more for a railroad right-of-way than you would for a public highway. I can't see any comparison between the two.

Q. There are those elements which arise out of the dangerous character of the railroad when constructed?

A. Yes, sir.

Q. In your opinion, in any case, the railroad company is entitled to the cost of its investment, even though the property had gone down, is it not?

A. Well, I haven't considered that at all.

Q. Didn't you consider that when you said you didn't think the property ought to be put in at less than it cost the Company in any case?

Mr. HOLDEN: I don't think he said that, if your Honor please.

Attorney General YOUNG: Well, this witness is able to take care of himself.

Mr. HOLDEN: That isn't quite the point, I think. The witness didn't say what counsel has suggested in the question. I

object to the question for that reason.

The MASTER: Well, the witness can answer whether he has made any statement of that kind, anything like it, or otherwise.

Question read.

A. If I said so, it was said for this reason: that our property in almost every instance that I know of has really increased in value over what it actually cost the Railway Company in the first place, and that being the case I have not put into my schedules of the cost of reproduction any place that I recall a value less than the property actually did cost the railroad company in the first place.

Q. What would be your idea of the proper thing to do if you found that at the time when the railroad was built through any particular locality the land was worth, say, $50 an acre and at the time you were called upon to make an estimate of this kind, you found that adjacent land was worth only $25 an acre?

A. I should put it in as of the present date, as nearly as I could determine.

Q. There is no such instance in your experience on your system?

A. I don't recall any now.

Q. And that results from the fact that your railroad was largely built when the country was new, and since it was built the country has been developing and building up?

A. Yes, sir; that is true.

Q. There are portions of your road in Minnesota, are there not, where the right-of-way has been acquired within the last eight years——which I think you said was the limit of the period that you thought ought to be taken into account?

A. Yes, sir.

Q. There is a portion of the road from Thief River Falls to Warroad, isn't there?

A. Yes, sir. These schedules only run to Greenbush.

Q. It has been finished to Warroad since these schedules were prepared?

A. Yes, sir.

Q. That road is located in northwestern Minnesota, in what is known as the Red River valley?

A. It is from Thief River Falls, in Red Lake county, up to Greenbush in Marshall county, I think.

Q. Have you put in your estimate in that case on what the right-of-way cost the Company?

A. No, the estimate is higher than the actual cost of the right-of-way to the railway company.

Q. How many years ago was that right-of-way acquired?

A. I think that was about 1904, that is five years ago.

Q. Wasn't land higher in 1904 than it is now in that vicinity?

A. Not to my knowledge. My information is that it is higher now than it was then.

Q. What do you think as to the difference in the price of ordinary farm land throughout the state now, and its price four years ago, is it higher or lower?

A. I think in many districts it is lower now than it was five years ago—four years ago.

Q. Isn't it true that in all districts it is very much lower?

A. No I couldn't say that it was in all districts, but as a general thing it is probably not as high now as it was four years ago.

Q. You put in the value, you say, as of June 30, 1908?

A. Yes, sir.

Q. And still you put in the primary value of the right-of-way at a higher price than what was actually paid for it in 1904?

A. Yes, sir.

Q. Could you furnish us the actual cost of the right-of-way on that piece of road?

A. That could be done; yes, sir.

Q. Will you furnish it to us within a reasonable time?

A. Yes, sir; it can be done.

Q. That would be the property shown in Section 29 of your road as divided for appraisement. You stated a moment ago that you took into account the improvements on land abutting upon your right-of-way in fixing what you called the market value of land as a basis for your estimate; do I understand by that that you took each governmental sub-division, say a quarter section through which your road passed, and without regard to where they were located upon that tract you included in your estimate of primary value, the value of all the buildings?

A. Well, I can tell you, the way we arrived at the market value was to ascertain the average value of wild land and improved land between certain districts, between certain stations, which made an average value of the land between those particular points for the market value.

Q. And in the case of any particular farm you included in its value the value of all the buildings?

A. Well, that would naturally be; when you get the value of improved land, the average value of improved land would take in the value of improvements as well.

Q. And you have already stated, I think, that the improvement-value was included in the basis to which you applied your multiple?

A. Yes, sir; that is, the cost of removing or damaging or destroying those improvements.

Q. Well, the market value of a farm, for instance, having a valuable house and barn upon it, a quarter of a mile from your right-of-way, was fixed by spreading over the entire farm the value of those buildings?

A. I take it that is the way they estimate the value of farm lands where they are improved with buildings and fences and out-buildings.

Q. Do I understand that you not only took into account the added value to the land because of those buildings upon the various governmental sub-divisions thereof, but that you also took into account the cost of destroying buildings on adjacent land where they were so near the track that if it would be necessary to acquire that land for right-of-way you would have to remove the buildings?

A. That all comes in the increased cost of reproduction over the market value of land for other purposes.

Q. You did consider those things?

A. It has to be considered; yes, I did consider them.

Q. And you considered that on both sides of the right-of-way of your road?

A. Let me make it as clear as I can.

Q. All right.

A. We get from the returns the average value of wild land and the average value of improved land between certain districts, with improvements and average value of all lands, as a market value of lands for farming or other purposes along through which our railroad runs. And then, assuming that is the market value of lands, we place a right-of-way value which is greater than that for the reason that we have to pay not only for the average value of the lands, improved and unimproved, but we have to pay for the severance damages and the damages to the improvements, either by the proximity of the railroad to them, or by the fact that they have to be removed or changed, or sometimes, entirely destroyed. That is what gives the difference between the market value and the right-of-way value. Do I make it clear?

Q. I think you stated yesterday that those things were the things that justified the application of your multiple of three to the primary value, is that true?

A. Well, I think that is true.

Q. Now, what I am getting at is, in addition to your mul-

tiple of three, haven't you added to these various lands that you thought it would be necessary to acquire, the cost of removing or destroying the improvements existing thereon where the improvements were adjacent to that right-of-way?

A. Not before adding the multiple of three, no, sir. We take it just as so much land.

Q. Did you take that element into consideration after you had applied the multiple of three?

A. The multiple of three, or whatever multiple is used, whatever difference is in the difference between the value of "market-value" and right-of-way value—everything is included in that, all those elements of damages increasing the cost.

Q. Do I understand, then, that the result obtained by applying your multiple of three is the final result?

A. Yes, sir.

Q. Or is there not something in addition added to that for the cost of either removing or the value of improvements that might be destroyed?

A. No, that result obtained by use of the multiple or by adding a percentage, whatever it may be contains all the elements of damage. There is nothing added to that.

Q. Well, now, in a country village, suppose you find that the property on one side of your right-of-way is built up to valuable buildings and on the other side it is not improved at all; what value do you take as a primary basis before applying your multiple of three?

A. I can give you an illustration of that in the city of Barnesville. There is a town or city which is laid out on one side of our track; the main street is adjacent to our right-of-way and station grounds, and the main business of the town is on that street. On the other side of the track is open country, practically farm land; it comes right up to our station grounds. Well, now, a town like that is perhaps as hard a place to estimate as I have had to estimate in this appraisal.

The way I did that was to go and find out the actual value, as near as I could ascertain, from inquiry from the assessor who made the assessment last, and from bankers there, and real estate men and land men, what those town lots were reasonably worth within certain districts. They vary between certain parts of the city, the business lots being worth more than they are on the outskirts, necessarily . I then ascertained what the value of farm land was adjacent to the town from the assessor and others who know,—people right there on the ground. I then divided up our station ground, which contained a considerable area, using about one city block for the edge next to town, dividing up, pro-rata into lots and valuing that at the same ratio as the city lots adjacent, and the balance I estimated as so much farm land, at that value; and I applied a multiple of three to the farm land value and I added a certain multiple (I don't know just the exact amount, it wasn't any uniform multiple) to the city value for the strip through which the lots would run.

Q. In estimating the value of those lots, you included the value of all structures and improvements?

A. Well, no, in estimating the value of lots in the first place, I took the bare lots without improvements.

Q. But you included the improvements before you got through?

A. Yes, I included in the estimate a percentage for improvements, whatever it might be.

Q. And that percentage was the actual value of the improvements, so far as they existed on the land?

A. Well, not necessarily, because in a great many cases we can dispose of buildings and get something from them and they can be moved off, or the owner may reserve the building and move it off himself. It would not be fair to put in the entire value of all improvements on adjacent property, and I have not done so.

Q. Well, how much did you put in and how much did you leave out?

A. Well, it varied, as I stated before, in almost every case; it depended on how the thing was built up.

Q. Purely arbitrary?

A. Purely arbitrary.

Q. It rested with you?

A. Just what in my judgment I estimated it could be done for.

Q. Which side of the actual right-of-way as it exists, did you figure that you were going to reproduce the road?

A. It would have to be reproduced just where it is. I estimated that in case the railroad wasn't there, there would be a certain growth in the city which would probably extend over on our right-of-way to that extent, and the balance would be as it is now, vacant property.

Q. The very fact that the railroad is strung along your right-of-way on one side, shows that the entire village has been built there, and built in that form solely because your railroad is there, does it not?

A. Well, it has been built in that form because of the railroad; whether it is solely because the railroad was there, I could not say.

Q. There wasn't any village there when the railroad was built, was there?

A. No, it was built in the early days when there wasn't any town there; there was very little settlement there.

Q. And the town was built along the railroad right-of-way?

A. Yes, sir.

Q. And it would not have been so built had the railroad not been there, in all probability?

A. Well, that is speculation. I don't suppose that it would have been built just in that particular form.

Q. If it were possible to conceive of a town like Barnes-

ville being built out there on the prairie without any railroad at all, it is very certain, is it not, that it would be built more compactly than it is, and not strung along the right-of-way of your railroad?

A. It probably would not have been built just in the form that it is, without the railroad there.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. You stated, I think, that in ascertaining the market value of the rural property adjacent to your right-of-way, as a basis for ascertaining the value of the land embraced in the right-of-way, you took into account all of the improvements on the rural lands involved; in other words, you counted in on each tract of rural lands the value of the buildings, houses and barns and everything of that kind?

A. In arriving at the value per acre of the improved property?

Q. Yes.

A. Yes, sir.

Q. If that method of ascertaining the value of railroad property, by getting at the cost of reproduction, is to be followed in the future, it is true, is it not, that every time a farmer builds a house or a barn in the vicinity of your railroad, that such improvement increases the value of your right-of-way and enlarges the basis upon which your rates are to be computed?

A. I can't say as to the rates, General, nor do I think that the building of additional farm houses or barns adjacent to our right-of-way increases the value of our right-of-way for railroad purposes; but if we were to make a valuation at a subsequent year from what we have done, the additional improvements, of course, would go to add towards the value per acre of improved property adjacent.

Q. Your position, then, is, as I understand it, that the construction of these improvements does not in fact affect at all the value of your right-of-way for railroad purposes?

A. I don't think it does, as of this time.

Q. But it was taken into account in these estimates of the cost of reproduction which you have presented here in court?

A. It was; yes, sir.

Q. You stated, I think, on direct examination, that the method followed for ascertaining the cost of right-of-way in the three large cities was different from the method pursued in the rural districts, did you not?

A. Yes, sir.

Q. You did not assume within the three large cities to exercise your own judgment as to the value of the real estate used by the railroad for its right-of-way, yards and terminals?

A. I depended particularly upon the judgment of the real estate men whom we employed to make the valuations for us; I assumed they would know more about the conditions as of that date than I would because of their larger experience in buying and selling real estate in these cities.

Q. So you picked out three men in each one of the cities and you commissioned those three men to go out and appraise the value of the lands owned or occupied by the Company for railroad purposes, did you?

A. Our instructions to the real estate men were to make an appraisal of the value of the Great Northern Railway property in the three cities mentioned as real estate. Not as railroad property, but as real estate.

Q. And your instructions to them were not to appraise the value of the easement in that property necessary for railroad use, but to appraise the value of the fee, were they?

A. To appraise it just as the property adjacent was valued in their opinion, what it was worth as a piece of real estate, based upon the value of adjacent property to it, without improvements.

Q. And the valuation was to be based upon the idea that the property was to be privately owned and that the fee as well as the easement was to be devoted to railroad purposes, was it?

A. I don't think that question entered into our instructions to them or into their appraisal of the property.

Q. Well, just what did you say to them? Did you give the instructions?

A. There was a conference of the railroad right-of-way men of the different roads of the state, in the early fall of 1906, at which we had the real estate men present, and told them just what we wanted them to do was to make an appraisal of each road's property in the cities, and what we wanted was the real estate value, their opinion and judgment as to what it would cost to acquire it as real estate, without improvements. That was our instructions to them; that was the conversation we had; they were not instructed, I think, in writing, if I remember.

Q. Were you present?

A. I was present; yes, sir.

Q. Nothing was said to them about ascertaining what the easement in the land necessary for railroad use was worth and what the value of the reversion would be?

A. No, sir.

Q. And so far as you know, no such thing was taken into consideration?

A. So far as I know; no, sir.

Q. Well, the three men employed in this city went out and made an appraisement, did they, of what they considered the cost of re-obtaining the property used by your Company for right-of-way and terminals in St. Paul, in case the Company did not now own it?

A. They made an appraisal, as we asked them to do of what in their judgment it would cost, or what it was worth at the present time, based upon the value of the adjoining prop-

erty, and as I understand that is what they returned to us, what they estimated it to be worth at this time.

Q. Do you really know what they did do, of your own knowledge?

A. Well, I know only from their reports to us.

Q. When you say that they were asked to report to you the value of the property merely as land, what do you mean?

A. Without any improvements on it at all, just as a bare piece of property extending through the city from the depot to the edge of the city limits.

Q. In this city there have been built up adjacent to your right-of-way and so as to be reachable by side-tracks a large number of valuable buildings, used for wholesale merchandising purposes, have there not?

A. That is true to a greater extent of some other roads than of the Great Northern; we have in the wholesale district only the property along on Third street on which our freight houses are located and between there and Sibley street we have property running through to Third street between the depot property and the street, then further on, up through Trout brook we run in a narrow ravine, with other roads on both sides of us, until we leave the other roads at Westminster street, and from there on we have quite a stretch of territory that can be utilized for that purpose, but has not been to any very great extent as yet.

Q. Well, when you instructed these men to ascertain the value of the right-of-way of your Company with reference to the value of adjacent property, you meant, did you not, with reference to the value of adjacent business property and not with reference to the value of adjacent railroad property?

A. Well, I think we had in mind the same theory there that we had in other parts of the state—that if we had to take our road off that strip of land and reproduce it, that is what it would be worth to anybody for the highest use to which it

could be put; that it was impossible, in some cases, to have any other use except a railroad use for it; and I think, in taking into consideration the value of our property, they must necessarily have had some idea of that in their minds, but I think they are the ones to say as to what they actually did.

Q. They are the ones to say what they actually did and you are the one to say what you actually instructed them to do. What instructions did you give them with reference to that subject?

A. Well, as I have stated before, the only instructions we gave them was to value the property as a piece of real estate through the city.

Q. And all further you know about it is that they did bring back a report to you of a valuation?

A. Yes, sir.

Q. Did that report specify the mode of procedure followed by the appraisers?

A. No, sir; the report gave us merely the price per square foot of land through which our right-of-way ran in certain districts of each city.

Q. Substantially all of the railroad tracks in the city of St. Paul are in the vicinity of yours, are they not?

A. I guess the greater number of them are; yes, sir.

Q. Which road was the first built there, do you know?

A. That was before my time, of course; my understanding is that the St. Paul and Pacific or the Minnesota and Pacific, but I can't be positive as to that because I have never made special inquiry into it.

Q. That is one of the predecessors of the Great Northern?

A. Yes, sir.

Q. Do you know what the population of this city was at the time your road was built?

A. No, sir.

Q. Do you know what the population of the state was?

A. No, sir.

Q. Or of any subdivision of the state?

A. No, sir.

Q. Well, when you got this appraisement from these men whom you had sent out to do this work, what did you do with it?

A. We took the maps which they had been furnished with and which they returned to us and estimated the area of right-of way in the various districts which they had arbitrarily fixed and applied the price per square foot to the areas so obtained, in order to get an amount for each district, and from those amounts we made a total value, which has been returned in this estimate of cost of reproduction, with the additional 25 per cent added for severance damages, cost of improvements to be destroyed or removed, and any incidental cost in obtaining the property over and above what we considered was the real-estate value returned by the real estate men.

Q. What do you mean by "improvements to be destroyed or removed"?

A. Just as I have stated in reference to the country station grounds, if the railroad was not there the property would likely, or at least we have assumed would be, improved to a certain extent similarly to the property on either side, and, just as we find in buying new right-of-way we have to remove or destroy certain improvements in addition to the obtaining of the land itself, we have to pay for those changes.

Q. Upon what theory did you fix in your mind the probable amount of the improvements that you would have to take over and destroy?

A. That was purely arbitrary and there was some difference of opinion as to the proper percentage to add to the real-estate value, but after practically considering the matter in every light I determined on 25 per cent as being fair and not excessive to place in addition to the real-estate value for the other value.

Q. You consulted with other officers of the road before you agreed upon that 25 per cent, did you?

A. Yes, sir.

Q. What officer?

A. With Mr. Hill and Mr. Wilkinson.

Q. Did they agree with you as to the character and kind and value of the improvements that you were to assume would be on the land?

A. That I think was not entered into but simply the question of the percentage to be added.

Q. In ascertaining what percentage should be added did you go back to the time when the road was constructed and find what percentage had to be added at that time because of this character of improvements?

A. No, sir.

Q. Made no inquiry about that?

A. No, sir.

Q. What kind of structures did you assume would be on this land?

A. Well, similar structures to those on the adjacent land.

Q. Did you assume them to be brick or wood or stone?

A. In the wholesale districts brick, in the residence districts wood.

Q. Did you determine what kind of brick they would be built of?

A. No, sir.

Q. What kind of foundations they would have?

A. No, sir.

Q. Or roofs?

A. Similar only to the character of the improvements at the present time on adjacent land.

Q. You could just as well have justified any other per cent as 25, couldn't you?

A. No, sir; I think not.

Q. As the assumed value of the improvements?

A. No, sir.

Q. Why not?

A. For the reason that in the larger cities the percentage of increased damage is not so large as it is in the smaller places; that is, the real-estate value, aside from improvements, is so much greater in the cities that the difference in the value of improvements does not cut as much figure.

Q. Suppose you had taken 35 per cent instead of 25, could anybody have successfully questioned the percentage?

A. Those percentages are a matter of judgment and experience in buying right-of-way, and that is my judgment.

Q. How did that come to be a percentage of the value which might be fixed upon the real estate by men over whom you had no control and of whose opinions you had no knowledge? did you find that upon a certain amount of your right-of-way there would probably be certain structures of a certain value, or did you just simply sit down and take a percent of the real-estate value as the probable value of the structures?

A. Well, it is pretty hard to tell just how we arrived at it; we took into consideration all the elements that we thought would necessarily go into a valuation of that kind in order to make a railroad value over and above the value of real estate for other purposes, that is, for adjoining purposes.

Q. Well, the value of these imaginary structures did not in any degree depend upon what value these commissioners might place upon the real-estate, did it?

A. No, sir.

Q. What percentage of supposed value would you have used if the commissioners had appraised this land at twice the value they returned?

A. I can't say as to that, because they didn't return any "twice" value, and they did return this value, and on that we put our 25 per cent after considering it in all its lights.

Q. But you would have added 25 per cent, even if the value had been twice as great, would you not?

A. I can't say as to that.

Q. What per cent would you have taken had the valuation by the commissioners been 50 per cent only of what they returned?

A. I can't say as to that, I haven't considered it.

Q. Well, what I want to get at, Mr. Hayden, and I would like to have you tell the Court, how you got at that per cent.

A. Well, if we take the property down here at the corner of Third and Sibley streets, that is property which we acquired under cover, and the railway company was not known in the transaction; we got it in the open market, had plenty of time in which to buy it, and we got it presumably at its fair market value; and if we should turn it into property for railroad purposes, we would have to remove those buildings, and it would cost us, if we had to buy it for railroad purposes and remove the buildings, I estimate about 25 per cent more than we had to pay when we bought it.

Q. Did you base all your reasoning on that individual instance?

A. No, I just gave you that as an instance.

Q. Well, is that the only instance that has arisen?

A. Oh, no, I think we have a great many instances; I can't give you all of them now, nor can I give you any considerable number of them, because we considered it as to what we would add for a railroad-value purpose.

Q. The amount that it would cost you to remove the buildings on the property you have referred to is a specific sum, is it not?

A. Well, it would be, if we had estimates of what it would cost to do it.

Q. Yes, and that sum amounted in that instance to about 25 per cent, you say, of what you paid for the property?

A. No, I didn't say so; I said what we would have had to pay for railroad purposes and remove the buildings would have been probably 25 per cent more than we actually paid for the property. It might have been more than that.

Q. I don't know that I follow you. You bought certain property down there with buildings upon it?

A. Yes, sir.

Q. Now, if you intended to convert that property to railroad purposes, it would cost you something to remove the buildings, would it not?

A. Very likely.

Q. What percent would that be of what the property cost you?

A. I can't say as to that particular case, General.

Q. Well, what do you mean then by saying you used that instance as a basis from which to draw conclusions?

A. As going to show that we bought property which has improvements on, and in order to use the property for railroad purposes we have to destroy a portion of its value for commercial purposes in order to clear the property and get it ready for railroad purposes; that is, the property as we bought it, with the buildings on, and the property if we had to buy it, without any buildings on, is a difference of at least 25 per cent.

Q. Does it cost you 25 per cent more with the buildings on, do you mean?

A. No,—I don't know that I make myself very clear, although I am very clear in my own mind just what I meant there. When you come to buy property for a railroad right-of-way with buildings on it, as I stated this morning, you don't always value the property for the full amount of the improvements, because you can sometimes dispose of those and get something out of them, and that affects your percentages.

Q. Now, to get back to this specific property you referred

to as a justification for your arbitrary percentage of 25 per cent, you stated that your Company purchased that property without its being known that it was being purchased for railway purposes?

A. Yes, sir.

Q. And that you thought you got it for about its market value?

A. For commercial purposes; yes, sir.

Q. And you say that it would probably have cost you about 25 per cent more if it had been known that you were buying it for railroad purposes?

A. It would have cost at least 25 per cent more.

Q. Now, there were certain structures on the property; and if that particular property is to be used as a basis from which to draw conclusions, we ought to know your opinion of about what it would cost to remove the structures from that property so as to adapt it for railroad purposes.

A. My opinion is that we would not get out of the buildings any more than just the amount of salvage in the material; that, in other words we would not get anything for the buildings.

Q. And about what percentage of the cost of the property would it cost you to remove the buildings?

A. I don't know that I can answer that.

Q. Do you think it would have cost 25 per cent of what the whole property would have cost to remove the buildings?

A. No, sir.

Q. What property is that that you have referred to?

A. That is the property from Sibley street to Wacouta, on the south side of Third street, the Kelly building, and the buildings from there to Wacouta.

Q. When did you buy that property?

A. It was purchased at various times from 1903, I think, or 1904, up to within one or two years ago.

Q. It is included in this appraisement, is it not?

A. Yes, sir.

Q. Is it put in at what it cost you?

A. It is put in at $8 a square foot by the real-estate men, and 25 per cent added makes it cost to reproduce $10 per square foot.

Q. What did it cost?

A. It actually cost us $9.73 per square foot.

Q. All of that property?

A. Yes, sir.

Q. Did the appraisers return that property at less than you paid for it?

A. They returned it as real estate without improvements at $8 a square foot.

Q. But that was without counting the improvements?

A. Not counting the improvements; yes, sir.

Q. There are some valuable buildings on that property?

A. There are three or four story brick buildings on the property.

Q. The cost of removing buildings from property is not a fluctuating cost, is it? It is specific and fixed in character?

A. Why, I think it fluctuates as to the character of buildings very much.

Q. Well, what I mean is, the cost of removing the buildings does not depend on the value of the property?

A. It depends on the character of the buildings.

Q. In giving the cost of removing structures from any given quantity of property, do you think it could be safely given on the theory of being a certain percentage of the value of the property?

A. No, sir.

Q. An item of cost like that has nothing to do with the value of the property?

A. It has very little to do with it.

Q. So that when you add an arbitrary percentage to the

appraised value of property for any such purpose as that, it is an entirely arbitrary proceeding and is not based upon any rule properly applicable to such cost nor properly deducible from experience?

A. Well, that is one of the elements only which enters into our 25 per cent increased value in this case. There were other considerations that entered into it to make up the total of 25; I don't think we used an exact ratio for the removal of the buildings. That was only one of the elements that made up the additional 25 per cent.

Q. The 25 per cent arbitrary that you added to this valuation was based on the theory that the valuation included only the real-estate value without improvements and that there possibly would be improvements upon the land which you would be obliged to buy and obliged to remove, and your 25 per cent was intended to cover both, was it?

A. Yes, sir; that is the idea I had in mind.

Q. But, as a matter of fact, of course, if the reconstruction of the railroad was to be upon the identical right-of-way which it now occupies, there would be neither buildings nor the cost of removal involved?

A. I think there would be, in certain districts of the city; yes, sir.

Q. There are no buildings now on your right-of-way, are there? That is, I mean by that on the right-of-way occupied by the tracks.

A. No, there can't be where there are tracks.

Q. And you stated, just a moment ago, that there were no buildings adjacent to the greater portion of your right-of-way in this city, for the reason that you were surrounded by other railroads or by property which has not been improved?

A. Well, that is true down in the Third street district, but if our railroad wasn't in the Third street district, that might be built up to very solid wholesale houses, and probably would

be, on account of its proximity to other railroads.

Q. Well, your railroad, lying between the lines of other companies, would not be a suitable place for wholesale warehouses, would it?

A. I think the whole district from Sibley street down to the crossing of Third street would be the best district in the city for that purpose.

Q. That is, your right-of-way alone?

A. Our right-of-way alone, yes.

Q. Well, of course, when you go into that field of speculation, we could assume anything to be true or not to be true as the case might be. You followed this same method, did you, of adding an arbitrary increase to the returned value of the property owned by your Company in Minneapolis?

A. Yes, sir.

Q. And you said that in Duluth you used some other plan of enhancing the value as returned by the appraisers?

A. Yes, sir.

Q. What was taken into account in Duluth that was not necessary to be taken into account in St. Paul or Minneapolis?

A. In Duluth we have a little different right-of-way proposition from what we have in the other cities. We have a narrow strip of land running along Michigan street, which we purchased as full lots, and then we cross over the tracks of the Northern Pacific to Rice's Point on an overhead structure which we follow down to the Northern Pacific bridge on Rice's Point, and then we have a strip on the northeasterly side of the Omaha tracks which is on the surface of the ground; we have really two rights-of-way on Rice's Point, one on each side of the Omaha tracks, broadly speaking. The real estate men fixed the value of land on Rice's Point at $3,000 per acre as the real-estate value. I multiplied that by 3 for the right-of-way value for our right-of-way on Rice's Point, and was justified in doing that by the fact that we had paid for some of that right-

of-way as high as ten or eleven thousand dollars per acre, but it was small pieces, and if we had to reproduce it, I don't think we could reproduce it for anything less than $9,000 an acre, if we could get it for that on Rice's Point, and that is one case where I increased the valuation of the real estate men. On the dock property which we own on the water front in Duluth proper, they fixed a valuation of $250 000, to which I added 25 per cent for railroad value.

Q. What do you mean by railroad value?

A. Well, for railroad purposes. We bought the dock for the use of steamships, loading and unloading, and for railroad terminals, and they appraised it as commercial property, and I estimated that the railroad's use was a higher use, in that particular case, than the commercial use.

Q. So that you arbitrarily increased it 25 per cent on account of the higher use?

A. Not 25 per cent, $25,000 over the appraised value.

Q. Oh, I understood you to say 25 per cent. When did your Company acquire its right-of-way on Rice's Point?

Mr. HOLDEN: I think he did say 25 per cent, General.

WITNESS: Well, I meant $25,000.

MR. HOLDEN: I think the witness did say 25 per cent and apparently from his last answer, he wants to correct it.

The MASTER: I understood him to change it, though, to $25,000.

WITNESS: It is about 10 per cent in that case.

Q. When did you acquire your right-of-way on Rice's Point?

A. That was acquired in the years 1888 and 1889.

Q. You say you have acquired some small pieces since, that cost you a high price?

A. Well, we acquired some since 1889 that cost us as high as ten or eleven thousand dollars an acre, and in support of the figures which I have made in this valuation, there have

been recent changes of property on Rice's Point at the lower end that have been at the rate of 30 cents a square foot, or about $13,000.

Q. Was Rice's Point built up and improved at the time that you acquired your right-of-way there as much as it is now?

A. Not as much as it is now.

Q. Have values on Rice's Point gone up generally, or have they gone down, since your railroad was built there?

A. They have gone up.

Q. Very much?

A. Rice's point is a narrow point of land extending out into the bay there, and the railroads come in on that, cross the Northern Pacific bridge, and come in across the Duluth-Superior bridge in order to get into the city proper; it is sort of an entrance, a narrow neck of land, and for that reason it is becoming very valuable for that particular purpose.

Q. You didn't use, in getting the value of your right-of-way there, what it cost the Company to acquire it?

A. No, sir.

Q. You have the information as to what it cost the Company, haven't you?

A. Yes, sir.

Q. Did you acquire it by purchase or by condemnation?

A. Most of it I think was by actual purchase. There may have been one or two condemnations, I am not perfectly clear on that subject.

Q. I think you stated yesterday that your Company pursues the policy of buying property outright rather than acquiring an easement in it by condemnation, because of the additional advantage of complete ownership of the land?

A. Well, we do buy it by warranty deed, and by fee title where we can get the title, because we have to pay just about as much for the easement as we would for the fee title.

Q. You don't expect to have land condemned at all, you go

right out and buy it wherever you want it, don't you, as a rule?

A. As a rule we start to make our purchases first; we do not condemn until the prices are so high that we cannot agree with the owners, and it seems to be the only method whereby we can get it at all in some cases. It is a last resort. It is a very expensive method of getting a right-of-way.

Q. You prefer, and would pay more for, the fee than for the easement, in any event, would you not?

A. Well, as I say, we pay about the same whether we get the fee or whether we get an easement.

Q. Well, what is your policy with reference to it? Are you willing to pay more for the fee than for the easement?

A. Well, a little, but not a great deal, I should think.

Q. When you buy the land you never buy the mere easement, you buy the fee of the land?

A. Well, I wouldn't say we never do, because we have, in some cases, just got an easement. Some people won't give a fee title; they will say they will give you an easement for railroad purposes as long as you use it for that purpose, and that is all they will give, and in those cases we only take a reversionary interest in the land.

Q. You stated yesterday that you were of the opinion that you had better rights in land where you got a deed of the fee?

A. I think we have.

Q. And therefore you prefer to get the fee than the easement?

A. I should get the fee in every case where I could, without excessive cost.

Q. That is one reason why you buy your right-of-way outright instead of resorting to condemnation?

A. That is one of the reasons, yes, sir.

Q. When did you buy your dock property in Duluth?

A. That was ten or fifteen years ago, I don't know the exact date, General.

Q. Do you know what it cost?

A. I don't at this time, no, sir; not off-hand.

Q. You have the information as to what it cost?

A. Yes, sir.

Q. Was that dock property purchased for your ships or for your railroad?

A. For both.

Q. It is used by the ships of the Northern Steamship Company, isn't it?

A. It is not so used at this time no, sir.

Q. What is the name of the steamship company that your Company is interested in up there?

A. It is the Northern Steamship Company which owns the Northwest and the Northland; the freight steamers have been sold.

Q. This dock property was purchased at the time you were operating freight steamers on the lakes?

A. Yes, sir.

Q. It is not needed for railroad purposes, is it?

A. It is not used at this time for railroad purposes.

Q. You have it in here as a part of this appraisement?

A. We consider it a part of our terminals there and a necessary part of our railroad property in the city of Duluth.

Q. But it would not be a necessary part if you didn't intend to operate any more ships, would it?

A. I don't know that we do or do not intend to operate any more ships.

Q. Well, you don't need any dock property for your railroad, do you?

A. I think it is a necessary adjunct in a city like Duluth where the trade is one-half at least in shipipng.

Q. What use are you making of it now?

A. There is a track down on the dock part way and I think one or two warehouses, small warehouses.

Q. It is not being used for any railroad purpose at the present time, is it?

A. Except the use of the track that is on there now.

Q. What is that track used for?

A. As a switching track, and to reach certain industries which are there.

Q. There is a very large part of this property that is of no use for railroad purposes, at the present time, isn't there?

A. You mean the dock property?

Q. Yes.

A. There is considerable of it that is not used for railroad purposes at this time.

Q. Your Company owns the fee of that property?

A. Yes, sir.

Q. Could sell it at any time?

A. I can't say as to that; I hardly think so.

Q. If you own the fee of it, why couldn't you sell it, if it isn't necessary for railroad purposes?

A. Well, I can't say whether it is necessary for railroad purposes or not. It was bought for that purpose and we are holding it for that purpose, and I imagine ultimately it will be used for that purpose.

Q. You said it was bought for shipping purposes at the time you owned a line of freight ships?

A. Well, it was bought for that and for railroad purposes, for a railroad terminal, for a railroad yard.

Q. So far as your railroad in Duluth is concerned at the present time, this dock property is surplus property and could be sold without in any manner interfering with the operation of your railroad?

A. It could be sold if the Company considered they didn't need it for the purposes for which it was bought or for other railroad purposes.

Q. For anything you know, the Company may be holding

it for purely speculative purposes?

A. It would be the first time that I knew of them doing such a thing.

Q. In other words, your Company never speculates?

A. Well, we don't in terminal property; I don't think we ever did that.

Q. Well, you went out of the steamship business up there, sold the ships, didn't you?

A. The ships were sold, yes, sir.

Q. They were not considered any necessary part of your railroad?

A. Well, they were an adjunct to our railroad at one time, yes, sir.

Q. But whenever it seemed advantageous to sell them, the Company disposed of them?

A. They did.

Q. And they could dispose of the dock property purchased for the accommodation of those ships in the same way at any time, couldn't they, so far as you know?

A. So far as I know, if they wanted to.

Q. You do not want to be understood as saying, do you, Mr. Hayden, that the values that you have placed upon the right-of-way and terminals as shown by these exhibits 9 and 10 are the present values of the properties?

A. What I have been asked to do, and what I have done is to give my best judgment as to what it would cost to reproduce the properties as of June 30, 1908,—the cost of reproduction, not their value; not in any other sense their value, but what it would cost to reproduce them.

Q. If you were asked to give testimony as to the value of the right-of-way and terminals of the Great Northern road, would you offer these tables as evidence of that value?

A. I would have to consider it, because I have not considered it up to this time.

Q. That is not what you were attempting to prove by these tables or exhibits?

A. No, they are just simply my judgment of what it would cost to reproduce them or repurchase them at this time, on June 30, 1908.

Q. You mean, Mr. Hayden, do you not, the reproduction under all of the assumptions that you have mentioned in your testimony here?

A. Yes, sir; I have stated how I arrived at these figures, and the values are based upon that assumption.

Q. There is not given in these tables anywhere, so far as you know, the cost of any part of the right-of-way or terminals of your Company?

A. I think with the exception perhaps of the reservoir at Ihlen. It is on section 7, I think, General, at the bottom of the sheet. The last item there shows the exact figure of what that reservoir cost us.

Q. So far as you know, that is the only item in the entire series of tables which shows the exact cost, and that is $10,157?

A. I think in the case of the city of Virginia, that that is an item of actual cost, also, and in the city of Carlton, it is either the exact cost or very near to it.

Mr. O'BRIEN: What pages are these on?

WITNESS: Virginia is on section 39; Carlton is on section 35. There may be other places in there that I don't recall at this time, but wherever we had anything bearing on the value of those places I put it in at the actual cost or very near to it. The case of Cloquet is one I mentioned this morning.

Q. That was a case where your Company bought a large amount of property of one of your officers?

A. Yes, sir; one of the directors.

Q. You referred a moment ago to section 39; is that correct?

A. Virginia is on section 39; yes, sir.

Q. What portion of that exhibit gives actual cost?

A. The item of Virginia is $19,800; that is either the actual cost or in round figures about the cost.

Q. When was that acquired?

A. That was acquired about two years ago, I think; I can't give that exactly, but I could get it for you if you wish.

Q. I don't care about the exact date. How did you come to put that in at cost and not the others?

A. I had in the former estimate a lower valuation for Virginia than the figures I have given, and in making the increase, as I made in some other cases through the exhibits, I wanted to be fair in making those increases, and I put it in very close to the actual cost.

Q. Is it a little higher or a little lower than the actual cost?

A. If you will notice there that the right-of-way value is $5,000 per acre, it is the nearest figure to that—is the way I got at it.

Q. And that was done because in endeavoring to ascertain the actual value at the present time you found it to be less than what the property had cost?

A. No, I had the appraisal or the report to the state railroad and warehouse commission, less than this figure, and I had to raise it in these estimates, and where I did so I was very careful not to raise it in excess of what any investigation would show to be the actual facts.

Q. Cost?

A. Not the actual cost, necessarily, but the actual cost of reproduction at this time.

Q. In your return to the railroad and warehouse commission how did you come to put it in at less? You were putting it in then at what you thought it was worth, weren't you?

A. Yes, but as I stated before, the report was made up hurriedly without the necessary time and attention given to it which it should have had.

Q. You have in your direct testimony, Mr. Hayden, a statement with reference to the interest which the Great Northern owns in what is known as the Minneapolis Western Switching Company, and included that, as I understood it, with the valuation upon which it is claimed the Great Northern is entitled to earn a dividend; as a matter of fact the Minneapolis Western is an independent corporation, is it not, and reports separately to the railroad and warehouse commission of the state?

A. I can't say as to the reports, because that is not done through our office. It is a separate corporation at this time, but the stock is entirely owned by the Great Northern Railway Company.

Q. Entirely owned?

A. That is as I understand it.

Q. But the Company operates independently and makes its return and declares a dividend upon its stock, does it not?

A. I can't say as to that, because I am not advised.

Q. Well, will you ascertain what the fact is about that and furnish us the information? You also spoke about the interest of the Great Northern in the Union Depot Company of St. Paul?

A. Yes, sir.

Q. That is also an independent corporation, is it not?

A. Yes, sir.

Q. Operated independently?

A. It is operated by the various roads which enter into the depot; that is, it is a corporation composed of the various roads.

Q. But it is a corporation and it is known as the Union Depot Company and operates its own property and earns a dividend, does it not, on the investment?

A. I presume it does; it operates separately from the Great Northern Railway Company at least.

Q. And the Great Northern simply owns certain stock in

that company, and has nothing to do with its operation?

A. They have a certain interest, and I take it they have a certain voice in its management by reason of the ownership of that interest.

Q. In other words, the Great Northern is one of the incorporators?

A. The Great Northern?

Q. The Great Northern.

A. Yes, sir.

Q. But the Great Northern receives compensation or a dividend upon the stock it owns in that company entirely independent of anything that the Great Northern Railroad owns, or earns rather?

A. I think that question should be answered by some other officer than myself, because I don't know those things from actual knowledge.

Q. Well, you have put those properties in here as a part of the properties of the Great Northern System?

A. By direction of our attorneys; yes, sir.

Q. But you don't claim that it is property upon which the Great Northern is entitled to earnings for the operation of its road, do you?

Mr. HOLDEN: Just a minute. If your Honor please, this witness does not make any claim as to what property the Great Northern is entitled to earn a return upon. This question, I take it, is highly improper to ask this witness, whether he claims that the Great Northern Company is entitled to earn a return upon its interest in the St. Paul Union Depot Company.

Attorney General YOUNG: That probably is calling for something that this witness would not know.

The MASTER: I think the witness is explaining the matter.

Attorney General YOUNG: Let me change that last question. I withdraw it.

Q. The interest of the Great Northern in the Union Depot

is included in your gross valuation?

A. No, it is not included in the figures of the gross here; you will find that that is a separate item and not included in the totals that I have returned; that is a separate and entirely distinct item.

Q. That, I guess, was reported by Mr. Hogeland.

A. I think so.

Q. The interest in that concern is not a real-estate interest, and your department has to do solely with the land?

A. Yes, it is just shown there as a matter of reference.

Q. Where is it shown?

A. I think on the second sheet.

Mr. O'BRIEN: It is not shown on any of your real-estate items?

WITNESS: No, sir.

Q. Do you desire to have that valuation made a part of your tables?

A. Well, that is a matter for our attorneys to say. I have not included it in my tables; it may be in Mr. Hogeland's, I can't say as to that.

Q. You do not claim to know anything about those properties so as to qualify you to testify about them?

A. No, sir.

Q. In the Union station property, you referred in your testimony on direct examination to a reservation or exception made in the deed by the Great Northern Company to the Union Depot Company?

A. Yes, sir.

Q. Whereby it reserved for its own use certain tracks on that property?

A. On the Union Depot Company's property; yes, sir.

Q. And you undertook to give the value of the rights so reserved?

A. No, the cost of reproduction of the real estate embraced

in that reservation, only.

Q. Do you know what the consideration was for the transfer of that property by the Great Northern to the Union Depot Company?

A. I don't, off-hand, no, sir.

Q. Do you know how the value now placed upon the reservation compares with the whole consideration received by the Great Northern for the land at the time they transferred it?

A. No, sir.

Q. You placed the valuation of the reservation I think at $366,948?

A. The value based upon the valuations placed by the real-estate experts was $366,948, to which I added the 25 per cent, as I did on the Great Northern's property, for railroad value, making $91,737, or a total of $458,685.

Q. Did you know that at the time the Company sold the original property to the Union Depot Company the whole property was sold for $185,000?

A. I did not.

Q. If you did know that, would it have made any difference with this estimate in your opinion?

A. No, sir.

Q. The amount reserved there is a very small part of the tract transferred?

A. Well, I think it is the most valuable part of the entire tract, for the reason that it is adjacent to the commercial or business district of the city.

Q. Do you know whether it is the theory of the real estate men that that side of the right-of-way is the more valuable?

A. I can't say as to what their theory is.

Q. I think theirs is the reverse. Section 4 of your road includes the Breckenridge division, does it not?

A. Yes, sir; or, more properly speaking, it is the line from

Cedar Lake yards at Minneapolis to Breckenridge. I think the names of the operating divisions have perhaps been changed somewhat.

Q. On sheet No. 2 of section No. 4 the first item appearing upon the page is under the head of Location, Willmar to Pennock; you give the average market value of the land at $50 per acre?

A. Yes, sir.

Q. And the average right-of-way value at $150 per acre?

A. Yes, sir.

Q. Did you want to testify that that is the true market value of land in that vicinity?

A. I am willing to testify that that is the result of investigations by real estate men and others as to the value there, yes, sir.

Q. And that the various values given in the same column in which you purport to give the value of the land between Willmar and Pennock are the values, respectively, of the lands in the vicinity of the places mentioned as the location?

A. I believe that that is the fair average value of the lands between those places, yes, sir. In support of the figure of $50 between Willmar and Pennock, I have a letter from the Tallman Investment Company, of Willmar, of which this is a copy, which reads as follows: "Mr. Charles Hayden, Dear Sir: You would be justified in placing the valuation of land in Kandiyohi county adjacent to your right-of-way in all directions (he means from Willmar) at $50 per acre. If any exception was to be made to this it might be reduced to $40 per acre in the northern part of this county, (that is Kandiyohi county), and also in the extreme western part, although I doubt very much if you could secure any land adjacent to your right-of-way at less than $50 an acre; but for farming purposes some of that in the northern part of the county as well as the extreme western part would not be worth more than $40 per acre." The

agent at Willmar also obtained from S. E. Stansbury, F. E. Smith and C. K. Robinson, men at Willmar who are supposed to know farm values, the following prices of lands in the vicinity of Willmar: Unimproved $20 to $35 per acre; improved lands $40 to $100 per acre.

Q. Well, this land is in the extreme western part, is it not?

A. It starts at Willmar; that is not the extreme western part.

Q. Pennock is the extreme western part, is it not?

A. That is about the extreme, yes, sir; but near Willmar it runs from $40 to $100 per acre, close to town, so that $50 is not an unfair average to assume.

Q. Land through the part of the state covered by section 4 of your road (sheets 1, 2 and 3) is worth considerably less now, is it not, than it was three or four years ago?

A. I can't say as to that, because I made no inquiry three or four years ago as to that particular land. My impression is that it is not very much less, though, than it was then, because that is a very good part of the country, it is always very productive.

Q. Is it your idea that right-of-way value ought to fluctuate, up or down, with the prices of rural lands?

A. Well, I think if you were acquiring a right-of-way it might fluctuate with the price of the land.

Q. After you have acquired your right-of-way do you think that it ought to be subject to such fluctuations and that the earning capacity of your road ought to be changed as land along the right-of-way goes up or down?

A. Well, I haven't had anything to do with the earning capacity of the road. I was asked to make an appraisal of the cost of reproduction as of a certain date, and I have endeavored to do that. The question of rates or earning capacity didn't enter into it.

Q. Well, the question of rates would very materially enter

into the result of your testimony, so you will understand why I am asking you.

By Mr. O'BRIEN:

Q. Mr. Hayden, you were going to let us know whether or not you would produce a statement as to the original cost of the right-of-way and terminals?

A. Yes, sir; I got a statement of that kind at noon which I have here. (Producing statment.) This is the total amount expended for right-of-way on the line from Thief River Falls to Greenbush, up to and including June 30, 1908; there are no details given, but they can be furnished if the state wishes it. The amount is $19,255.03.

Q. How does that compare with your estimated cost of reproducing that real estate?

A. The estimated cost of reproduction of that line from Thief River Falls to Greenbush (at the end of track) is $50,894.

Q. And all of that property has been acquired at a cost of $19,255.03?

A. Yes, sir.

Q. Beginning at what period and ending at what period?

A. Well, in a general way, about the fall of 1903; the nearest date I have to that in my memorandum here is November, 1903.

Q. Up to June 30, 1908?

A. To June 30, 1908. Of course most of it was acquired in the fall of 1903 and the spring of 1904, when they were constructing the road.

Q. Can you furnish a statement showing the original cost of right-of-way and terminals in Minnesota, prepared practically upon the same plan so far as separation of tracts is concerned, as you did of Ex. 10?

A. I think that would be an impossibility, Mr. O'Brien. I wish to correct my testimony of this morning to that extent, in

which the question was asked me whether we could furnish the original cost of our right-of-way in the state of Minnesota. I answered at that time yes, but I overlooked the fact that the records do not show the original cost of the St. Paul and Pacific (that is, the original cost of right of way) nor do they show the original cost of right-of-way on several branches which were purchased from other companies, so that it would be impossible to give you an accurate statement of the first cost of the entire right-of-way in the state.

Q. With the exceptions you have mentioned, could you prepare such a statement?

A. It could be done; it would take considerable time.

Q. How much time do you estimate it would take?

A. Well, I think it would take at least two months, the way the records are, because in the early days they didn't keep things as carefully in the way of details as they are doing in these later days.

Q. Well, will you prepare and furnish us such a statement?

A. If our attorneys so direct, I will.

Mr. HOLDEN: Are you serious about that, Mr. O'Brien?

Mr. O'BRIEN: Certainly.

Mr. HOLDEN: Mr. Hayden has stated what my understanding is, that, except for comparatively recent periods, and, as I think the fact is, for a comparatively small number of miles, the state of the records of the Great Northern Company would make it a very long and difficult, not to say expensive, operation to ascertain the cost of right-of-way. A great many of these lines were built by other companies—the St. Paul & Pacific, and certain other companies that Mr. Hayden has mentioned, (which is a matter of common knowledge,) many years ago, and I think it is a matter of common knowledge that the accounting methods in the railroad business as well as in other kinds of business were of such more or less primitive character that it would be a very difficult job to work out, from such en-

tries as the books may contain, even approximations as to what the land cost. It is a matter of common knowledge that certain of the right-of-way arose out of land-grants, a small fraction of the present right-of-way, and there are various difficulties of that kind. Now, I am not making this suggestion with any purpose to avoid or deny access to our records in the fullest extent possible, but if it is going to take two months or any such delay in this case to work those figures out, I think the State should furnish the men, and state on what proposition they offer or propose to offer that evidence as a part of their case. Our conception of the cost proposition is that in remote days, (which is a matter of common knowledge and judicial notice,) the cost of lands can have little if any bearing, and my conception is that it has no bearing on the cost of reproducing those lands today. We don't think it is a part of our case to show the cost of lands 25 or 30 years ago or 20 years ago, or 15 years ago, I may say. Our conception is that the present cost of reproduction bears directly upon the present value. Now, if our opponents think that the original cost has a pertinency and a bearing, our records are open to the widest extent for any searches they may care to make. But as I am at present advised, I don't think we would be justified in submitting to an adjournment of two months in this case or to a delay of two months and the expense of searching ancient records, old deeds, things of that kind (and that is the only place we could look) with the result that as to the St. Paul & Pacific and certain other lines built by other companies we can't show it at all,—I don't think it is a reasonable request under those circumstances, because of the practical impossibility of showing any completed figures; but if counsel will indicate any particular line, any particular mileage that they want an investigation made, we will ascertain the state of the records on that subject, if it is any line that this Company or the Manitoba Company constructed in this state, or any other part of the sys-

tem, so far as that is concerned. We would be glad to ascertain the state of the record and see what we can do; but to take the entire mileage, as the request now is, and furnish the total cost, it is an impossibility. It simply reduces itself down to what we could do within reasonable limits of time and expense and I would be glad to entertain a proposition for any particular road or piece of road and see what we can do, with the understanding that if counsel for the state desires that, it is a part of their evidence and their case which they may offer or not as they see fit.

Mr. O'BRIEN: Now, I don't think that it can be said in this case, or in any of the cases that have been tried, that the State has endeavored to place any unfair burden upon the Complainants. We are here in a case where there are three sets of rates attacked, not in the first instance by the railroads or their officers themselves, but by their stockholders. Some of those rates had been put in force and were in operation for six months before this action was commenced. The passenger rates had been in force a month before the cases were commenced; the commodity rates had not been in force at all. The ordinary presumption that attaches to a legislative act is much stronger in this case than it is in an ordinary case, and for the purpose of overcoming that, it seems to us that the most complete evidence is necessary. It has been held, over and over again, that the railroads are entitled to a fair return upon the value of the property devoted to the service. The Court has never yet laid down a hard-and-fast rule for the purpose of ascertaining what part of the property is to be considered as devoted to the service. The supreme court of this state in the Steenerson case intimated that the proper way of arriving at that was by ascertaining the cost of reproduction; but even in that case the theory of applying the term "cost of reproduction" to real estate, as has been attempted to be done in this case, was not suggested, as I remember it. That rule has never

been accepted by this court, the court we are trying this case in; and in the case of Smythe v. Ames, it was directly held that the original cost was one of the items to be considered. Now, it seems to me, owing to the efforts of all the counsel in this case, and it seems to all of us, that we are securing a record which will enable the supreme court of the United States to have before it every possible phase of this question of valuation, on which it may be hoped that we will have a decision which will be of the highest benefit to all parties concerned. In the Spokane rate case, which was just decided, the Interstate Commerce Commission complained bitterly of the absence of sufficient data upon which to determine the value of the property. It did not accept the cost of reproduction as being the whole amount; and it referred to this same statement that has been made here with reference to the Great Northern road, to the fact that some of its property was acquired from branch roads, built separately, some of it acquired by foreclosure and in different ways, and as I say, that commission found itself unable to determine and make a suggestion as to what was the proper method of valuing property because of the insufficient evidence that was introduced. Now, in every one of these cases, we have been met by the same situation, by a mass of tabulations, prepared without any consultation, and after the tables were introduced the State is informed that it and its officers may go to the offices and check those staements up and verify them if they see fit. Everybody knows that the capacity and resources of the State are limited, and that while we have been strained to the utmost in trying the case in which the Northern Pacific was involved, the experts and able counsel upon behalf of the Great Northern had been preparing this voluminous evidence. It is clearly a matter of cross-examination; it is clearly a matter within their own knowledge; it is clearly a matter of their own records. We ask for no statements as to what the right-of-way of the old St. Paul & Pacific

cost,—I presume it cost nothing, and was included in the large land-grant that went with that road; and surely what has been done subsequently is known. We have not asked if the Great Northern hasn't in its possession the records of some branch line, as to what the right-of-way cost. What we have asked for is that such matter as they have be given and furnished here, in order that the evidence may be, as it was in the case of Smythe vs. Ames. I don't care, myself, what suggestion is made with regard to whose evidence this is. It is so clearly evidence upon behalf of the Complainants, under the decisions of the Court, it is so clearly evidence that they have in their own possession, that it seems to me it is not necessary that we should argue that; but it doesn't make any difference, we haven't reached the point in this case yet where we have found it necessary to contradict a direct statement of fact given by a witness as being a matter within his own knowledge. We do contradict many theories and estimates that have been made; but as I say, it is clearly a matter of cross-examination; it is clearly a matter of their own evidence; and we would feel that we were doing less than our duty in these cases, if, after spending ten months now in trying them and putting in the evidence; if after going to the expense that the state of Minnesota has gone to, even in presenting the cases to the extent they have been presented, we omitted any element that is necessary. And just as we found occasion to say when the Northern Pacific case was being put in, we find occasion to say now, that if it lies within our power, by request, by subpoena, by coercion, (lawful coercion from the Court) or by any other means that are lawful to be employed by us, we intend to have the *facts* in this case presented to your Honor, whether it takes one month, two months, or three months. Now, the cost of that right-of-way, so far as it is shown, can be produced here, I have no doubt, in a reasonable time. The case need not be continued for two months or for any other time. These cases will

not be finished in their entirety, the three cases that are on, before two months; it need not delay these cases one hour. Even if it did take two months to prepare that evidence, it is a part of the evidence in this case and one of the elements that should be presented to the Court and which we will insist must be presented.

The MASTER: Mr. O'Brien, will you state again just what you are asking for, so we may have it in a concrete form? I am not sure but it is in the record, but I would like to have it stated.

Mr. O'BRIEN: We ask that the witness produce a statement of the original cost of the right-of-way in the state of Minnesota of the Great Northern Railroad Company, so far as that original cost is shown by the records and books of the Great Northern Railway Company or subsidiary corporations under its direction and control.

The MASTER: Including stations and terminals, as I understand?

Mr. O'BRIEN: Yes.

Mr. HOW: Do you confine it to the records of his office or the records of somebody else's office?

Mr. O'BRIEN: Well, of course I don't confine it to anybody's records, Mr. How. I am asking the information broadly and in good faith, and expect it will be met in the same way.

Mr. HOW: Well, I have views upon that subject and very strong ones. If Mr. O'Brien is sound in what he says (and that I concede for the purpose of expressing my views) I think the Master should bear in mind that this witness is brought to present his opinion as to the present cost of acquisition of the real estate. It is no more competent for counsel to cross-examine him upon the original cost of the real estate, which they say is a separate and independent element to be considered by the Court in determining the value of this property, than it is for them to cross-examine him on the original cost of construc-

tion of the system after the real estate is acquired. It is not a matter of cross-examination of this witness, if competent at all, if material at all, in this case; and we submit that we ought to be judges of that so far as our own case goes, and they can be judges of it so far as theirs goes. If material at all in this case, we are entitled to produce our own witness, and it is not competent, not proper that they should demand of this witness that he produce a statement made from the records of other departments in his Company, as to which he has not been examined at all, which he cannot verify and which he knows nothing about.

The MASTER: I don't understand that this request is made of this witness alone, but so far as these records are in his custody it is made, and so far as they are in his custody it is a demand or a request which they make of the Complainants in the action.

Mr. HOW: Well, then, we shall deal with it when we get to it; but, in any event, if it is a material element in proving the value of the Great Northern system upon which we expect or think we are entitled to a return, is it not our lookout as to whether or not we present it? If we don't present it and it is material and we don't explain our failure to present it, their course is easy.

The MASTER: Well, I asked Mr. O'Brien to state, as he has, the information desired, and I don't think it is proper for the Master to pass upon the materiality or relevancy of that testimony at this time, and it is simply for the Complainants, as it seems to me, to state their position in the case and whether or not they will furnish the information or what they will do in the premises. The Master has no right to direct or order what shall be done; it is for them to acquiesce or to decline.

Mr. HOLDEN: Well, if I may make another suggestion, to repeat what I said before, we have nothing upon our records that is not open to inspection.

The MASTER: I understand that; you are perfectly willing that examination shall be made,—

Mr. HOLDEN: Perfectly so.

The MASTER: —but the question is whether it shall be made by you and under your direction, or by them, you throwing your books and records open to them; except, I believe, that you protest that the delay which it will occasion is such that it ought not to be required.

Mr. HOLDEN: We don't concede, and can't conceive, that it is a part of our case; and, on the other hand, we don't want to put anything in the way of the State's ascertaining the fullest information that our records may show. The difficulty is not only a legal difficulty, as to the relevancy of the proof, but it is also a practical difficulty. Mr. O'Brien's statement is that he wants a production of all that our records may show as to the original cost. Now, that leaves the matter about as it was before when he made his request for a full showing of the total original cost. It would require of us, if we undertook the work, a most extensive and exhaustive examination of old books and records and deeds, book entries, vouchers, things of that kind. It seems to me the effect of this application is practically an application for an order on us to produce books and papers, it is in the nature of a subpoena *duces tecum*, and it is entirely too vague and uncertain. Without forcing this thing down to an exact technical basis, it seems to me if counsel for the State would possibly give this matter a little further consideration among themselves and eliminate some of the lines which we know we cannot find the information upon and select certain lines upon which it is perhaps true that we might get some information and indicate those particular parts of the road, we will ascertain what the records show and the amount of work involved to get it out; and I say now that, subject to the position I have made before, we must insist that this shall be offered, if offered at all, as a part of their case; we will

facilitate them, as far as we can, in making up such exhibits or statements as they may desire to make up from our books; but I cannot say at this time that we will accept a roving commission of that kind to bring in all the information that our records may show, because that simply means an examination in toto of all our records, going back to the earliest periods that we have any records, running down each and every item to see whether there is anything there or not, and, substantially, it is the same request as made before. If it is the purpose, as I think it is to facilitate this matter and to get something concrete, it seems to me the counsel ought to indicate, with some definiteness and certainty, just what is wanted, just exactly as if they were acting under a request for an order on us to produce, something more specific, something more definite, upon which we can act; and after we have taken what they may request of us as to the part of the line on which we may have records, it may be that that will be all they want. I regret, myself, and I think every person in a similar position to that in which we are in a case of this kind, would regret, that the records are in the shape that they are, so that this matter cannot be immediately turned to; although, as I say, we don't conceive it to be material, but the matter comes as if our opponents will think we ought to be able to furnish them with every facility for getting whatever we have got; and I think that the Master should and ought to properly take the position, by analogy to a court process of this kind, that there should be a more definite statement, in view of the admitted condition of the records on that subject.

The MASTER: Of course, this request was suggested before. The opinion that the Master intimated was with reference to whether it was proper cross-examination, but it is a different situation now, and I do not feel at liberty to pass upon the relevancy and materiality of the class of testimony which they are asking for. They have made their request and if you gentle-

men cannot adjust the matter between yourselves in some way, it will have to stand as a request made and refused to be complied with.

Mr. O'BRIEN: I don't think that it is proper to let the matter rest on the statement of counsel, because the counsel seems to confuse two conditions. Now, where a statement, tabulation or summary of a book account is presented and is accompanied with an offer to permit that to be verified by an inspection of the books, it is a very frank and satisfactory method; but where there is no statement presented to furnish a foundation for a verification by an examination of the books, the offer that the other side may have an inspection of books for the purpose of ascertaining facts to be offered in evidence, amounts to nothing and it hasn't any place here at all, and all of the offer that is made so broadly has nothing whatever to say to this question. Aside from that, what is pertinent in the statement of counsel is that if this is material to their case and they fail to produce it, we may be governed accordingly—that, of course, is entirely true; we insist that it is a part of their case, and one of the objects that we have in speaking of the matter at this time, when the matter is before the Court, is to call their attention to that, that it is not going to be a matter of oversight, that it is not going to be a matter of consent, that it is not going to be a matter of theory upon the part of the State; we state solemnly now that we consider that a material circumstance for them to show, and we insist that, as the matter stands at present, they can show at least a part of the original cost and that the duty is upon them to show what they can and show why they cannot give the balance of it; and our statement and our demand that they do that now is as much as anything a notice in effect as to what our position is. Now, if this can be done, practically I am authorized, I think by Mr. Young, and I fully agree with him to say, that we will be glad to meet the Complainant's counsel

half way in this matter. A great deal of this right-of-way was acquired at a time when most of us in this room know what the land was worth, even if the right-of-way of the old St. Paul & Pacific was not a part of the land-grant and cost nothing, we know what the land was worth about the time the road was constructed—a large portion of the land through which it ran was government land; we know what the land sold for by the railroad company, it is a matter that is well known and a matter that is within the knowledge of your Honor,—of course not of which you could take judicial notice, possibly—but we ought to be able to ascertain the facts on those matters without a great deal of dispute and without a great deal of trouble where it is old and where the records are lost. If they want to do that and give us a fair basis upon which it can be stated what these rights-of-way and terminals originally cost, we will meet them more than half way; we simply want to have that matter a matter of record in this case.

The MASTER: It occurred to me that perhaps if you gentlemen conferred together you might reach some common basis, and the hour of adjournment has come and passed; you might think it proper, perhaps before we meet again, to have a conference and determine just whether you can come to any adjustment or arrangement of the matter. If that is satisfactory we will leave it there without having it understood at present that there has been any determination reached.

Adjourned until Wednesday morning, March 24, 1909.

Federal Building St. Paul, Minn., March 24, 1909 hearing resumed at 10 o'clock A. M.

The MASTER: Gentlemen, in looking over this record, and particularly referring to the theory on which the Complainant has been introducing testimony as to the cost of reproduction, commencing at page 198, on the fourth day, I apprehend perhaps that some language I used was misunderstood, and perhaps, taken all together, it would appear just what I had in mind, and that was I doubted whether the testimony then sought to be elicited was relevant to the direct testimony, but I have used the word "immaterial" although I did at the time speak of it as not proper cross-examination. All that I intended to suggest then and all that I intended to indicate that it might be proper to rule upon was that I doubted whether it was proper cross-examination, but did not intend to decide whether it was material or not. I think that is a proper matter to be submitted upon the testimony and to be decided after the case has been submitted.

CHARLES HAYDEN,

recalled on behalf of Complainants, testified:

By Mr. HOLDEN:

Q. Mr. Hayden, directing your attention to the right-of-way on the line from Thief River Falls to Greenbush, you stated that the right-of-way was purchased there approximately in the latter part of 1903, and perhaps to some extent in 1904?

A. Yes, sir.

Q. Will you state, briefly and in a general way, the conditions along the line at that time?

A. At the time the road was constructed?

Q. At the time these purchases were made.

A. Well, it was a swampy country; above Thief River Falls there is very little settlement, and the lands were in such shape with the water that they could not be used to any great extent,

and there was very little settlement up to Greenbush at that time—I believe none right at Greenbush—and that was the condition in which we found it when we went to buy the right-of-way. I know it was very hard to get through the roads there, very hard to drive anywhere through those swampy lands.

Q. Do you know when the grading was done on that line?

A. I don't know of my own knowledge, but it was, I think, along in the spring of 1904; in that neighborhood.

Q. And do you know how long the grade lay there before the rails were put upon it and the track completed?

A. No, I couldn't say as to that.

Q. Not advised on that point?

A. No.

Q. Well, are you advised of the time when the line was opened from Thief River Falls to Greenbush for traffic?

A. Well, I was advised at the time, but I couldn't say from memory.

Q. What change, if any, has there been in the conditions over that part of the line between what they were at the time the right-of-way was purchased and the time you made your valuation as of June 30, 1908?

A. Well, the conditions have changed to this extent, that the building of the railroad grade and the cutting of the railroad ditches on each side provided drainage for the railroad, and also provided drainage to a certain extent for a considerable portion of the lands immediately adjacent to the right-of-way; and in addition to that, there have been, I understand, some public drainage ditches established in that part of the country since the right-of-way was obtained. There is also the fact that a town at Greenbush has grown up and the town lots have become valuable; and we have stations between Greenbush and Thief River Falls that I think increased the value of lands in their immediate vicinity over and above what they

were at the time the right-of-way was obtained. Those are about the changes in the physical condition of the land since the road was constructed.

Q. Has there been an increase in the population along the line?

A. Yes, sir.

Q. What is the nature of the land through there, so far as it is now being used?

A. Well, it is still swampy in places, but it is being used for agricultural purposes.

Q. Farms have been established, have they?

A. Yes, sir.

Q. This town of Greenbush—you say at the time the right-of-way was purchased there was no settlement there?

A. No, sir.

Q. There is a town there now?

A. Yes, sir.

Q. Have you any knowledge of the size of it?

A. Yes, sir; the census of 1905 gave a population of 295 people. That was about four years ago; and it is safe to say that there are more people there now than there were in 1905; how many I cannot say.

Q. Now, these other stations along the line which are shown in your sheet 29 of Ex. 10, has there been a substantially similar increase in population at those places?

A. There is very little settlement at the other stations, they are simply stopping-places; no particular towns, no, sir.

Q. Greenbush, then, is the chief settlement up north of Thief River Falls along that line?

A. Up to Greenbush, yes, sir.

Q. Well, now, has the coming in of people there made a difference in the value of lands adjoining the right-of-way?

A. Yes, sir; they have increased in value.

Q. Well, before putting your valuation as shown on your

sheet 29, did you make inquiry to determine that fact?

A. Yes, sir.

Q. And with those inquiries, will you state whether or not in your opinion the figures shown on sheet 29 represent as nearly as may be in your judgment the cost to the railway which it would now have to incur or would have had to incur as of June 30, 1908, if it at that time undertook to repurchase that right-of-way?

A. Yes, sir; the figures I have in the estimate represent my best judgment as to what it would cost to reproduce the right-of-way as of June 30, 1908.

Q. Have you any knowledge of sales of land at Greenbush within the last two or three years which would have a bearing upon these figures?

A. I looked up the record of sales a year or two ago, that is, the sales made by the state of state land, but I haven't got the details of those figures with me this forenoon; I do recollect, though, that the state sold the land upon which the town of Greenbush is now located, at public sale, and my recollection is that it sold at in the neighborhood of $23 per acre for the quarter-section; I can get you the actual figures if you desire them.

Q. Well, all that is a matter of public record?

A. Yes, sir.

Q. And about when was that?

A. That must have been in 1904 or near that time; about the time the railroad was building in there.

Q. You testified yesterday somewhat in relation to Section 4 of Ex. No. 10, which covers right-of-way and station grounds from Cedar Lake yards to Breckenridge; your testimony had particular reference to Kandiyohi county; and you read a letter; whom was that letter from?

A. That was from D. N. Talman.

Q. Who is he?

A. He is a banker at Willmar, and also in the real estate business.

Q. Do you know how long he has lived in or about that county?

A. I should say six or eight years.

Q. He has been in the banking business and real estate business, both?

A. Yes, sir.

Q. Do you know anything about his standing in the community there?

A. It is good, to the best of my knowledge.

Q. Is it such as to entitle his opinion on a matter of land values to respect?

A. I think so.

Q. Now, you stated the names of certain other persons who also gave opinions to you.

Mr. O'BRIEN: We desire to object to the last testimony and move it be stricken out, with reference to the qualifications of Mr. Talman, as incompetent.

Mr. HOLDEN: Well, under strict legal rules I should think perhaps that was the only competent part of his testimony, but we have agreed heretofore that this hearsay information as to values should go in because it has been put in on both sides by common consent as the expeditious way of arriving at these matters. Certainly Mr. Hayden (who, I think, has some knowledge on the subject,) can testify as to the identity of the man and his position in the community.

Q. Who were they, briefly, and what business were they engaged in?

A. S. E. Stansbury, F. E. Smith, and C. E. Robinson. These gentlemen I do not know personally; they are names of parties whom the agent at Willmar interviewed, at my suggestion that he see real estate men, bankers and others, who would know the actual value of farm lands in the neighborhood of Willmar,

and he has given them to me just as he got them, without stating what their business was.

Q. They were not men selected by you, but men who were selected under instructions you gave to your agent there, as you have stated?

A. Yes, sir.

Q. Now, your value in Kandiyohi county is placed (the right-of-way value) at $150, throughout the county?

A. Yes, sir.

Q. I should say $150 on this line.

A. On that section.

Q. In that county there are two lines of the Great Northern crossing each other; the main line, which is embraced in your section 4, and also the line running southwestwardly, which south of Willmar is embraced in section 7, and north of Willmar is embraced in section 16; what is that last line called, the Willmar & Sioux Falls line?

A. The line running southwest of Willmar was known as the Willmar & Sioux Falls; it was built under that name; it is now the Great Northern, having been transferred to the Great Northern.

Q. I notice on your section 16 (that part of the lands in this county running from the end of the double track at Willmar northeastwardly to Howick,) that you have various values of right-of-way, running from $120 at places to $180 and $200 at other places; on your section 7, (embracing other parts of the same line south of Willmar, running southwestwardly,) you have in that county a uniform vaue of $120. So it is not true that throughout the entire county you fixed a uniform figure of $150 for right-of-way value, but that you have placed different figures upon different parts of the county where the lines run. Are you personally familiar with that county?

A. I am personally familiar with the lands in our right-of-way, that is all.

Q. You have been over both of these lines?

A. Yes, sir.

Q. More than once?

A. Several times—many times.

Q. And have passed over them while you have been holding your present position as right-of-way commissioner for this Company?

A. Yes, sir.

Q. Well, in that way have you acquired a general familiarity with the character of the lands adjoining the right-of-way in that county?

A. Yes, sir.

Q. Now, Mr. Hayden, to what extent is that true as to the lands on either side of the right-of-way of the lines generally in this state? You have been over the so-called main lines a number of times?

A. A great many times; yes, sir.

Q. And is it not true that you have been over all of the lines in the state?

A. I think practically every line in the state, with possibly the exception of the Pelican Rapids branch.

Q. That is a small branch in section 21?

A. Yes, sir.

Q. Outside of that small branch line you have been over all of the lines in this state a number of times?

A. Yes, sir.

Q. Some of them a great many times?

A. Yes, sir.

Q. So in that way have you acquired a personal knowledge of the character of the lands in the different counties adjoining the different lines in this state?

A. Yes, sir.

Q. Has that knowledge been sufficient to give you, in your opinion, a knowledge or a mental picture of the character of

the country in each of the different counties?

A. Yes, sir; it has.

Q. Now, then, returning to Kandiyohi county, to what extent did you exercise your own opinion and judgment in addition to the opinions expressed in the letters you have referred to?

A. After receiving information as to values, I compared that with what I had already formulated in my own mind as to what would be the cost to secure right-of-way through that class of country, and I found that the real estate men's figures were not very different from my own as to the farm land value in that county along our right-of-way.

Q. I notice on your section 16, which embraces a part of the lines in that county, the spread between the right-of-way value and the column marked average market value, in some places is 3, in other places it is 2; for instance, the line from New London to Howick, 75.17 acres, you returned at $200 for the average right-of-way value, and show the average market value at $100.

A. That carried out at the end of the line is a gravel-pit.

Q. Have you opinions from real estate men or bankers from other points on the lines of this state?

A. Yes, sir; I have.

Q. From how many different points?

Mr. O'BRIEN: Hasn't that been all gone into Mr. Holden, in your direct examination?

Mr. HOLDEN: I didn't go into it at all, Mr. O'Brien, as I recall it.

Mr. O'BRIEN: I think you did. I think the witness testified he sent out letters to station agents, bankers and others. Probably you expected a more elaborate cross-examination than it received, but that is no reason for going back now.

A. I have not figured up the total number and could not give you hardly even approximately. In 1906 and 1907 I

obtained information from practically every station on the line in Minnesota where we had agents.

Mr. O'BRIEN: We submit that the witness has fully explained his method on direct examination, and that this is reiteration. We could put in our time much more profitably in other business than in going over it again.

The MASTER: The objection may be noted.

Q. I am not asking you to repeat the general statement in your original examination, but I was attempting to direct your attention more to the specific cases, such as Willmar. Now, have you any others in mind, or any other opinions of the character that you read? if so, please produce them and let us get them into the record.

A. I haven't anything in the neighborhood of Willmar except what I have already read.

Q. I didn't ask for anything in the neighborhood of Willmar; I said of the same kind, such places as Willmar, or other similar cities; if you have any others, let us have them.

A. I have prepared here a statement.

Q. What is the first which you have?

A. In Big Stone county.

Q. Where is that?

A. That is in the western part of the state, on the Brown's Valley line.

Q. That is section 10 of these lines?

A. Ex. No. 10.

Q. What opinions did you obtain covering that line?

A. In Big Stone county, the agent at Beardsley interviewed C. W. Gibhart, real estate dealer, and the Citizens State Bank. Each of those parties gave the value of improved land at $50 per acre. At Johnson station, Winter Brothers gave values of wild land at $25 to $30, and improved land $28 to $40 per acre. The Johnson State Bank, wild land $25 to $30, improved land $30 to $45 per acre. L. Neusell, $28 to $30 for wild land, $35 to $40 for improved land.

Q. What is your next?

A. I have these arranged by counties, alphabetically.

Q. Well, just state what it is.

A. Carlton county is the next; that is the station of Foxboro, on the line from Hinckley to Duluth.

Q. That is part of sections 33 and 35?

A. It would come on section No. 33.

Q. Well, state what the result of your inquiries there was.

A. The agent reported there that he interviewed John Larson, a member of the town board, who gave opinion as to value of wild land at $11 to $15 per acre, improved land at $30 per acre; J. A. Harris, hotel keeper, $11 to $15 for wild land, and $30 for improved land.

Q. I note that your value in that county is on the basis of $45 for right-of-way, and $15 the average market value.

A. Yes, sir.

Q. You did not adopt the high figures in the county which are shown for improved lands?

A. No, sir; I think that there are not a great many improved lands in the county, and it would not be fair to take the highest price for the market value.

Q. So your figures here, so far as they show market value, took the lowest prices. Proceed, what have you next?

A. I have Cass county, the station of Walker; it is on the line from Sauk Center to Cass Lake; that is on section 19.

Q. Proceed.

A. F. B. Davis, banker; wild land $4 per acre, improved land $6 to $20 per acre; Daniel Delury, real estate, wild land $4 to $6; improved land $15 to $20; John Bradden, wild land $4 to $10; improved land $10; Harry Paddock, land agent; $6 for wild land, $20 for improved land. I also have a letter from the agent at Walker, written in 1906, October: "Replying to yours attached" (that is a letter asking him to obtain from real estate men and bankers the average value per acre of im-

proved farm lands near the line of the Great Northern railroad in the vicinity of Walker, and also the value of vacant town lots) the letter reads: "Replying to yours attached, have referred your inquiry to Mr. F. B. Davis, cashier of Walker State Bank; he places a value of $25 to $40 on vacant lots, and $40 on land. Mr. E. I. P. Stalva, places a value of $50 per acre and declined to value lots. I personally know $25 per lot and $50 per acre has been refused for this property, and improved land adjoining station grounds on west side of track has netted from $125 to $1500 per acre for this year's crop. The land on east side of station grounds has just been put on the market at $100 per acre." Now, you will notice there is a wide range of values given at Walker. I was misled in the first place to place a higher valuation on the station grounds at Walker than I should have done, assuming that the town was at the station, which is not the fact, the town being some distance from the station grounds; and in this valuation I have reduced the valuation of the station grounds at Walker very considerably from what I had returned to the State in our report to the railroad commission.

Q. You have been to that station—

A. Yes, sir.

Q. —for the purpose of making an examination there, have you not?

A. Yes, sir.

Q. As well as other stations along that line?

A. Yes, sir.

Q. The values you placed on the right-of-way range from $60 to $45?

A. Yes, sir.

Q. And so market values of $20 and $15. Are these figures put on after an examination by you personally of the character of the land adjoining the right-of-way?

A. Yes, sir.

Q. Over that line?

A. Yes, sir.

Q. And after you had received the opinions of the different men you have read into the record?

A. Yes, sir.

Q. Next?

A. Next I have in order is Clay county. That is in the western part of the state.

Q. Embraces sections 23 and 24. Proceed, and let us see what we have there.

A. The agent at Felton station interviewed the following parties: A. Bye, who was the elevator agent at that place, who gave figures of wild land $15 to $20 per acre, improved land $25 to $35 per acre; Otto Dahl, general merchant, estimated value of wild land at $12 to $18 per acre, improved land $20 to $35 per acre; A. B. Sprecht, merchant, wild land $18 to $20, improved land $25 to $28 per acre. W. P. Chase, banker, wild land $20 to $25 per acre, improved $20 to $35 per acre. At Moorhead I wrote directly to the Wheeler Land Company, who do a considerable land business in Clay county, and received the following letter: "Right-of-way & Land Commissioner, Great Northern Railway Company, St. Paul. Dear Sir: Yours of the 27th ult. regarding the average value of farm land in Clay county along the line of the Great Northern Railway received, and will say we would value the same as follows, basing our valuation upon sales and prices at which the lands are held: from the south line of the county to the north by way of Comstock and Georgetown $65 to $75 per acre; from Barnesville to Felton by way of Glyndon $40 to $45 per acre; from Barnesville to Moorhead $55 to $65 per acre. Wheeler Land Company."

Q. You also have opinions from Clearwater county, covering section 42?

A. Yes, sir.

Q. That embraces but a very few miles of line; we will pass on to the next one—that is of minor importance. Douglas county?

A. Douglas county takes in the line from St. Cloud to Barnesville, section 17.

Q. State what you have for that county.

A. At Osakis, the president of the First National Bank, gives value of farm lands near town $40 to $75 per acre; three miles out of town $40 to $60 per acre. At Brandon, the State Bank of Brandon, gives the value of improved land from $30 to $45 per acre; J. Gamble, merchant, $30 to $50 per acre. At Garfield, Fred Swenson, of the State Bank, gives the value of improved land $60 to $75 per acre; C. Christensen, proprietor of the creamery, $40 to $75 per acre; J. P. McCord, hotel proprietor, from $40 to $75 per acre.

Q. The next county is Grant county, which includes parts of section 20 and section 4. At what points did you obtain opinions as to values there?

A. At Norcross, from William Boulting (business not given) the value of wild land $19 to $25 per acre; improved land $30 to $45 per acre. B. Torgersrud, wild land $19 to $26 per acre; improved land $30 to $45 per acre. Alfred Lund, wild land $19 to $26; improved land $30 to $45.

Q. Now, are you advised of the general character of the land adjoining the right-of-way in that vicinity? To what extent, in other words, is it unimproved or improved?

A. Well, it is partly. I should say about half-and-half, there at Norcross.

Q. I notice for lands running from Herman to Charlesville, between which Norcross is located, you have adopted the figure of $90 for right-of-way, and show a figure of $30 for market value, which seems to be the minimum price.

A. That is about an average.

Q. An average of the prices of wild and improved lands as

shown in the three opinions you have just read?

A. Yes, sir.

Q. Did you obtain some further opinions at Herman?

A. At Herman, from the First National Bank, $25 to $40 per acre, improved; C. H. Phinney Land Company, $30 to $40 per acre, improved land. (These are all improved.) Grant County State Bank, $25 to $40; O. C. Eaton, real estate, $25 to $50; G. W. Jones agent, $25 to $35.

Q. What other station have you?

A. The station at Ashby, J. L. Everts, banker (these are all improved lands) $35 to $45 per acre; S. C. Rugland, money loaner, he says here $35 to $45; E. Marden, farmer, $35 to $45.

Q. What next have you?

A. I next have Hennepin county, which takes in several lines.

Mr. O'BRIEN: Are those all you had from Grant county? You didn't give us your letters from Elbow Lake.

WITNESS: I haven't any from Elbow Lake.

Mr. O'BRIEN: That is one of the places where a large change has been made, is it not, in the valuation,—some thousands of dollars of difference in valuation per acre between the report to the State and your statement here?

WITNESS: There is a very considerable difference; yes, sir. The error to the State arose, in the first place, over a difference in a decimal point, but it also was reduced in this report for the reason that the town is a considerable distance from the station grounds and I did not consider it was worth any more for station ground than about the average of farm land value.

Mr. O'BRIEN: I thought you had a picture of this line in your mind.

Mr. HOLDEN: Are you cross-examining the witness now, or am I?

Mr. O'BRIEN: I didn't suppose that you were.

Mr. HOLDEN: Well, I am dead sure you are not, because I

am in the saddle right now.

Q. You show the value at Elbow Lake the same as for the farm lands between stations. On section 20 that is?

A. Yes, sir.

Q. Now, since you made your report to the state—Mr. O'Brien seems to be concerned with the fact that we have reduced these values—did you make further inquiries at that point?

A. Yes, sir.

Q. Was that one of the parts of the line that you passed over—

A. Yes, sir.

Q. —saw this place yourself?

A. Yes, sir.

Q. Concluded that your former values were erroneous and too high, and returned these values as your present judgment?

A. Yes, sir.

Q. You were speaking about Hennepin county, which embraces parts of several sections of the line. Will you state briefly what the result of your inquiries in that county was?

A. At Robbinsdale the agent reported his inquiry showed farm lands near the station to range in price from $100 to $200 per acre. At Rogers, improved land from $70 to $100 per acre. At Crystal Bay (which is on the Hutchinson line) the price of farm land adjacent to the Great Northern Railway $200 to $500 per acre. If land has lake shore it is valued or held at $1,000 to $2,500 per acre. That is a report from J. E. Stangland, real estate agent. At Maple Plain, unimproved land $75 per acre, improved from $90 to $100 per acre. St. Boniface, improved land $75 to $100 per acre.

Q. You also have reports from Hubbard county?

A. Yes, sir. At the station of Nevis, on section 19, wild land $5 to $15 per acre, improved land $20 per acre.

Q. Pass on to your next.

A. Itasca county, section 42—

Q. The line from Deer River to Fosston?

A. Yes, sir—wild land from $8 up; improved land $30 to $60. One man says "from $60 up"—W. C. Gilbert.

Q. Proceed to your next.

A. Kenabec county,—Grasston—that is on section 31—

Q. The line from Coon Creek to Hinckley?

A. Yes, sir. The report from that station is, wild land $15 to $25 per acre; improved, from $25 to $40 per acre. Kittson county—that is on section 24—

Q. That embraces the line from Barnesville to St. Vincent, at the international boundary.

A. Kittson county is the most northerly county on our line. At the station of Kennedy we have reports—wild land $20 to $30 per acre; improved, $30 per acre. At Hallock, wild land $12, improved land $25. That is, one party, Edward Nelson, register of deeds, makes that value. At Donaldson, wild land $20 to $25, improved land $25 to $30. At Humboldt (these are all improved lands) from $30 to $50 per acre. Lac qui Parle county is the next, on section 9. At Nassau station the report is, wild land $25 to $35, improved $32.50 to $40 per acre. At Louisburg, improved lands $45 to $50 per acre. The next is Lyon county, section 7. At Marshall, unimproved lands, from $30 to $50, improved lands from $38 to $75 per acre. At Lynd, improved lands $45 to $55 per acre. At Russell, unimproved, $30 to $35, improved $40 to $45—report from Russell State Bank. Marshall county, sections 24 and 29, Argyle, improved land $30 to $35 per acre. Middle River, which is on the Greenbush line, section 29, A. C. Keenson, banker, and Carr & Green, real estate agents, $15 to $20 per acre. At Stephen, average about $30 per acre. Meeker county—that is on section 4—at Litchfield I have a letter from Mr. P. Hanson, president of the bank at Litchfield, "In regard to the value of land, I think I am in a position to give you as near as possible the true value

of the real estate along the right-of-way in Meeker county. Between Atwater and Litchfield the land is worth between $40 and $45, some tracts $50 per acre, without any improvements. The land between here (Litchfield) and Dassell is worth $30 to $40 per acre without improvements. This is conservative and I feel that this is the true value of the land above referred to." At Darwin I have values given from $20 to $40 per acre.

Q. Is that improved or unimproved?

A. That is marked "improved land" here. In Norman county, section 24 at Ada, improved lands from $18 to $25 per acre. The next is Pine county, sections 31 and 32. At Kerrick the agent reports wild land $12.50 to $18, improved land $20 to $45 per acre. At Sandstone, land between Sandstone and Partridge, wild land runs from $6 to $15, and between Sandstone and Hinckley from $10 to $12.

Q. The testimony you have just been giving about Pine county is embraced in sections 31, 32 and 33?

A. Well, the three sections run through that county. At Kerrick—

Q. That is embraced in section 33 on this Exhibit?

A. That is correct; Kerrick is in 33.

Q. And Partridge and Sandstone are also in that same section?

A. Yes, sir. Pipestone, in section 7, at Jasper the report is $45 to $60 per acre. Ottertail county—that embraces sections 17 and 21—at Elizabeth, improved lands $30 to $50 per acre. At Dalton, improved lands from $25 to $45 per acre. At Pelican Rapids, wild land from $12 to $18, improved lands from $20 to $50. The next is Polk county—that embraces sections 26, 24, 25 and part of 30. At Angus, improved land $30 to $40 per acre. Beltrami, adjacent to the right-of-way, $15 to $40 per acre. Erskine, wild land $20 to $25, improved land $35 to $45 per acre. At East Grand Forks, land near city $75 to $100 per acre, four miles east of the city $60. At Fosston,

improved land $20 to $40 per acre. Red Lake county, on sections 27, 28 and 29. This, however, is for land in the neighborhood of Thief River Falls. Wild land from $10 to $17.50 per acre, improved land from $25 to $45 per acre. Sherburne county, section 13. The station of Zimmerman, wild lands from $10 to $20, improved lands $25 to $30 per acre. The next is Stearns county, sections 15, 16 and 17. At St. Joseph, improved land $50 per acre. At Freeport, from $30 to $50 per acre. At Avon, from $30 to $45 per acre.

Q. When you say, as you have said several times, for brevity, "that the report is" you mean by that that you have the details of the opinions of one or more, and usually two to four or five different individuals, from whom opinions were obtained?

A. Yes, sir; that is, the agent got it from these parties—their opinions.

Q. You have all the details of that at hand if it is desired to go further into the report from any particular county?

A. Yes, sir.

Q. Then proceed to the next.

A. Stevens county, sections 4 and 10. Going from Alberta, improved lands $50 per acre. Donnelly, from $25 to $50 per acre; going from Hancock from $30 to $50 per acre. Swift county, on sections 4 and 9. From Benson, lands run from $15 an acre for unimproved lands to $45 per acre. At Murdock, wild lands, $35 to $45; improved, from $45 to $55.

Q. The opinions you have from Benson embrace those of four different persons, real estate and bankers, do they not?

A. Four different parties. The next is Todd county, sections 17 and 18. Browersville, wild land, from $10 to $20, improved land $50. At Long Prairie, improved land $30. At Hewitt, from $35 to $60. At Bertha, $10 to $15 for wild land, $25 to $40 for improved land. At Eagle Bend, from $12 to $25 for wild land, $25 to $45 for improved land. At West

Union, improved lands from $35 to $50 per acre. Traverse county, sections 10 and 4. Brown's Valley, wild land, $30 to $50, improved land $50 to $100 per acre. Tintah, wild land, $18 to $33, improved land from $30 to $70 per acre. Wadena county, section 18. Menagha, wild land, $8 to $15, improved land, $15 to $30. Wadena, within one mile of town, $35 to $50, improved land; along Great Northern right-of-way (another party gives this) $20 to $35 per acre. Wilkin county, sections 17, 11 and 4. Campbell station, improved lands, $30 to $50 per acre. At Doran, from $35 to $40 per acre. In Wright county, sections 4 and 15. Clearwater station, wild lands, $10 to $15, improved lands from $30 to $35. Cokato, $75 to $125, improved land. Montrose, from $60 to $100, improved. Waverly, from $60 to $100, improved. Yellow Medicine county, section 7. Lorne station, $50, improved.

Q. Now, Mr. Hayden, you use the expression "improved lands." You mean by that lands under cultivation, do you?

A. Yes, sir.

Q. Lands which have been settled upon and which contain farm buildings and people having farms under active cultivation?

A. Yes, sir.

Q. You were asked some questions yesterday about the difference in acquiring land between acquiring the fee and acquiring an easement. As a practical matter in your experience in acquiring right-of-way, what difference has there been in the cost to the Company?

A. Well, there has not been a great deal of difference in the actual cost; the easement costs us, in most cases, about as much as the fee. Where we have a condemnation, by which we would get only an easement, we do sometimes, by paying a little more money, take a deed from the party rather than depend upon the condemnation for our title; but as a rule there isn't very much difference between the cost of the easement and the cost of the fee.

Q. You say after a condemnation you sometimes pay a little more to get a deed; that is after you have had your litigation—

A. Yes, sir.

Q. —with the owner, in order to bring him to the point of signing a deed to you?

A. Yes, sir.

Q. You have got to pay some additional consideration in order to get him to do that?

A. Well, in most cases, yes.

Q. But I wanted simply to get your opinion as to whether there is any substantial difference, generally speaking, between the cost of acquiring an easement, as you call it, by condemnation, and the cost of acquiring your right-of-way by deeds in direct dealings with the owners.

A. No, I think as between the two classes of title there is very little difference.

Q. In this matter of purchasing a right-of-way some questions were asked you yesterday and you started to give some statements as to the elements of damage which the owner ordinarily presents as reasons for the price he demands for the strip of land which you are after. Who lays out the line that the railroad is to follow, is it your department or the engineering department?

A. The engineering department.

Q. It then comes to your department to acquire the right-of-way or to ascertain what it will cost,—is that true?

A. Yes, sir.

Q. You stated yesterday in part, that when you approached a man for the purpose of acquiring or buying from him a strip through his farm, the market value or the going price of farm lands was one of the lesser elements that were considered. I wish you would state, in your own way, just what you meant and just what the fact is in that regard.

A. Well, what I meant to say was this, that when we come to buy a right-of-way through a man's farm, we don't start from the farm-land value as a rule. We have the stakes on the ground, which the man can see, and we very often go over the ground with him and point out just where the line is going to be located or has been located and he can see where the railroad is going to run with reference to his farm and with reference to the improvements, if he has any on it, and he fixes in his own mind what damage he is going to be put to and he fixes that without any reference, or with very little reference, to the value per acre of his farm, so that for that reason the land value has, of course, a lesser consideration in his mind than the question of the damages which he is going to sustain.

Q. Then if this approximate multiple of 3, which both sides in this case seem to come to rest upon, is to be taken, does it not mean two-thirds of the amount you have to pay goes for these elements of damage, and only one-third for the so-called market value of the land? For instance, if land is of the market value of $50 and you are called upon to pay $150 to get that land, am I right in saying that you pay $100 over and above the market value for these elements of damage which the owner of the land thinks he suffers?

A. Well, that is about what it amounts to; that is really the truth.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. When we adjourned, I think you were saying, referring to this multiple of 3, that two-thirds of the value or money consideration involved in a transaction of that kind, appeared to result from the elements of damage and elements of that character, and one-third seemed to rest upon the going, market price of the lands themselves; was it for that reason that you

have considered this question mainly and chiefly as a question of what it would cost the railroad company to reproduce these lands as right-of-way?

A. Yes, sir.

Q. Now, as I understand you, your first consideration of the matter in dealing with a piece of right-of-way or a piece of town lots or village property was to ascertain a figure which in your judgment it would cost to reproduce that land as railroad right-of-way; you have testified to a large number of reports made to you and opinions given you as to market values of such lands; now, what consideration, in making your final estimate as to the railroad right-of-way value, did you give to such opinions?

A. Well, I have used those opinions I received to verify the idea I had in my own mind as to the character of the lands in certain sections or districts and as to whether I would be justified in the ideas I had as to the right-of-way value, what it would cost us to buy right-of-way in those particular classes of lands in the various sections. In buying right-of-way, a right-of-way man has in mind about what it will cost a mile to get right-of-way; he doesn't always get it down to a basis of acreage, but he has to take into consideration all the elements of dan. which he ancipiates will be brought forward to influence the price which he will have to pay for the right-of-way.

Q. You spoke about values on Rice's Point at Duluth, and some recent changes of property that you have had notice of; how recent were those changes?

A. Within the last two months.

Q. And on what basis of price?

A. The price was 30 cents per square foot. I was in Duluth about two months ago, or just about the time that the Soo was condemning for an approach to the Duluth-Superior bridge, and our Company had endeavored to obtain some property for an approach from their elevated trestle to the Duluth end of

that bridge, and I was interested to know what the prices were at that time and I made inquiry of Messrs. Little & Nolte, who I found had made a valuation for the purchasers of that property down there, and they told me that that was the price which they had appraised it at, and in their judgment that was a fair price at that time.

Q. What does that work out per acre?

A. In round figures about $13,000 an acre.

Q. Has the Great Northern Company made purchases up there since 1889?

A. Yes, sir.

Q. And on what basis per acre were those purchases made, if you recall?

A. I thought I had those tabulated, but I find I haven't them with me. There were several small tracts adjoining the Omaha right-of-way on Rice's Point near the crossing of our overhead trestle. The Duluth Land & Warehouse Company were the owners, and it is my recollection, offhand, that we paid there from nine to eleven thousand dollars per acre (that is what the transfer amounted to.) I haven't got the date of that, it was some time ago, though, and the property has not certainly depreciated since that time.

Q. When you say some time ago, what do you mean by that?

A. Several years ago; I thought I had the dates of all those with me, but I find I haven't. I can get you those.

Q. Do you know how the figures indicated from those purchases, and from these recent changes, within the last two months compare with the valuations placed upon the Rice's Point property in your figures?

A. In my estimate I have figured the value of the right-of-way on Rice's Point at $9,000 an acre, for the property on the Point itself.

Q. State whether or not it is your opinion that that right-of way and property embraced within your figures could be re-

produced at that figure.

A. Well, I think the estimate is conservative; I didn't want to make it excessive, and I doubt very much if it could be reproduced for that amount, and yet I would not feel justified in making it very much more than that under any circumstances, at this time.

Q. Have you in your records any evidence in relation to a sale of part of the right-of-way from Sauk Rapids to the outskirts of Minneapolis, some years ago, by the Great Northern Company to the Northern Pacific Company, that is embraced in section 12 on the map?

A. Yes, sir.

Q. Well, now, will you briefly state just what that transaction was and the price paid per acre, and the date?

A. The date of the deed is April 12, 1883. That deed is recorded in the Secretary of State's office, St. P., M. & M. Railway book No. 1, at page 245. The consideration is $77,280. That conveyed to the Northern Pacific Railway Company the portion of the right-of-way then owned by the Manitoba Company which was situated easterly of a line drawn parallel with and seven feet east of the center line of the Manitoba railway. That, in effect, gave them 43 feet in width of our 100-foot right-of-way. It also gave them whatever station grounds there were on the east side of that parallel line. There are about 63 miles of the line from Sauk Rapids to Minneapolis, and the acreage deeded to the Northern Pacific 365.07 acres, which at the consideration paid by them amounted to $211.32 an acre, or $1,221 per mile. In the estimate of cost of reproduction of that same line we have a total acreage of 484.75 acres, an average value of $223.20, making an average per mile of $1,710, total value of $108,198, for cost of reproduction.

Q. The Northern Pacific sale was made in 1883?

A. 1883, yes, sir.

Q. Just what use did the Northern Pacific make of that

strip? What I want to have you show is whether or not the track that they built was in effect a double tracking of the Manitoba track, or was it utilized for an independent right-of-way and track.

A. It was used as an independent track; that is, they didn't have any benefit of our grade for their grade; they built their own bridges and their own culverts entirely separate, and they acquired additional right-of-way on the east side of the strip which they purchased from us, and they made an entirely independent line of railroad from ours.

Q. Are the two tracks close, side by side, throughout that distance, or do they diverge and separate?

A. Well, in some places they are reasonably close together, and in other places they are considerable distance apart. Of course the only distance apart they could be is the width of their right-of-way, not as we would call a double track,—12 or 14 feet apart. I would like to state, further, Mr. Holden, that the deed of conveyance expressly reserved all tracks, switches, buildings and bridges and everything of the kind; nothing transferred except the bare land in that transfer.

Q. You mentioned in your cross-examination the fact that the Great Northern Company owns certain lots and buildings in the city of St. Paul on Third street, adjoining as I understand it, the union depot property?

A. Yes, sir.

Q. And you stated that the actual cost to the Company of the property there owned was $9.72 per square foot?

A. $9.73 I have it here.

Q. Have you in your records the details of those purchases so that a full statement can be made if desired by them, and just how the cost-figure is worked out?

A. They are not in my particular department, but they can be had from the accounting department; this transaction was not worked out through the right-of-way office, it was worked

through outside agents and the consideration concealed, and even our own men didn't know what was being done at that time.

Q. While the purchases were being made?

A. Yes, sir.

Q. But the details are all a matter of record in the records of the Company?

A. Yes, sir.

Q. Are you advised of the purposes of those purchases?

A. Except in a general way that they are to be used for additional trackage or for depot purposes, or some other railroad purpose.

Q. Your information is that they were acquired for railroad purposes of the Great Northern Company?

A. Yes, sir.

Q. And are being held for that purpose?

A. Yes, sir.

Q. I wish you would explain a little more fully what is embraced in this addition of 25 per cent which you say you made to prices in St. Paul and Minneapolis returned to you by the committee of real estate appraisers. You stated yesterday quite fully that one of the elements entering into that percentage was the matter of improvements; will you state now fully just what the other elements, if there are any, include?

A. Well, one of the other elements was the matter of severance, where you take a portion of a lot and leave a part outside, and also the increased cost which a railroad has to pay sometimes in addition to what any other person would pay; that is, for any other purpose than a railroad purpose; and also the salaries and expenses of persons who would be employed to make these purchases and the office expense, whatever it might be, connected with the handling of the property. Those are some of the elements, and I think about all, that enter into that percentage.

Q. Now, then, do I understand that that percentage covers the spread in these cities in your judgment between the so-called market value and the so-called railroad value?

A. Yes, sir; I understand it that way and so meant it.

Q. And it is not confined to the mere matter of improvements?

A. No, that is only one of the elements.

Q. Now, you used the expression "the increased cost which a railroad would have to pay"; do you mean by that that because it is a railroad it has to pay this additional amount, or is it because of the fact that there is a demand by the purchaser for a particular piece of property which the purchaser must have?

A. Well, I think some of both elements enter into that, Mr. Holden. There is the additional price made necessary by the fact that the property is acquired in a certain particular way, in a long contiguous (continuous) strip, and that any person purchasing property in that manner will have to pay more than for property purchased here and there through the city would have to pay; and then there is the element, of course, that when a railroad company wants land some people think that because they are a railroad company they can afford to pay more than some other people, sometimes. That is another element. But I think anybody who would attempt to buy a long strip of property through a city would have to pay very much more than property purchased here and there where they could pick it up as they saw fit.

Q. Then, as you said yesterday, the railroad (perhaps this is more true in the country, although I think you referred to the effect upon a residence district that the coming in and the presence of a railroad has), introduces an additional element, does it not, in the way of added danger or annoyance from the presence of noise and smoke and matters of that kind?

A. Yes, sir. We had a case of that kind in Spokane, where

people living within two blocks of the railroad brought suit for damages by reason of the noise and smoke and annoyance of having a railroad in their vicinity, claiming it had depreciated their property. I believe the outcome of that suit was that only within the block in which the railroad was actually located were they entitled to damages from the railroad, although it was a notorious fact that the property did depreciate by reason of the building of the road.

Q. Some questions were asked you yesterday in reference to the effect upon the rural right-of-way resulting from the building upon the adjoining land of additional farm buildings, and you were asked whether in your opinion the adding of a barn or a farm building to an adjoining farm increased the value of the right-of-way passing by that farm. Will you explain just what your idea is on that subject? I don't know that I make myself clear or recall to your mind just what the questions were on that subject, but your answer, as I recall it, was that the mere addition of a building here and there to a farm would have no effect upon the right-of-way value; is it not a fact that as the country becomes more settled and the value of the adjoining land, as improved land, increases, that has an effect upon the cost of reproducing the land occupied by the right-of-way?

A. That is true; that is, my idea in answering that way was that the mere adding of a barn or a house on some particular farm did not increase the value of our right-of-way as a railroad right-of-way, but it is true that if a farming district is developing in that very way, by new buildings, a better class of improvements, a higher state of cultivation from time to time, the value of reproduction of right-of-way through that section would increase as between those dates in the same proportion; that is, ten years ago it would not have cost as much to reproduce, in my mind, a line between certain sections as it would as of today; and probably ten years from now, with the increas-

ed population and the better character of improvements and higher state of cultivation, it would cost more to reproduce right-of-way. Do I make it clear?

Q. Yes, that is clear to me. Now, do I understand you that in computing or making up your judgment as to the cost of reproduction you assumed a normal state of conditions; that is to say, did you assume that there was any pressure in the matter of time or any other unusual circumstances in fixing your value?

A. No, I figured that we would have a reasonable time in which to procure the right-of-way; the prices I put on are not put on with the idea that we would be hurried and have to make our purchases in a very short time, or anything of that kind; I figured just the normal conditions that usually obtain in buying right-of-way.

Q. Well, when pressure exists and shortness of time exists, what effect does that have on the cost of lands?

A. Well, it makes the right-of-way cost more, as a matter of course, because we haven't the time then either to condemn or take more time to negotiate; we have to pay then practically almost what the party demands. There are cases where they don't decide to build a line until they want to have it ready for a certain crop, and then they start the contractors out about the same time that they start the right-of-way man out, and the contractors get on the ground as soon as we do. In those cases we have to pay very much more for right-of-way than we would if we had time to go out and negotiate and make our contracts a month or two ahead.

Q. You spoke about the rearrangement of the yards at Cloquet, about four years ago; were you connected with those negotiations?

A. Yes, sir; I made the negotiation myself with the Weyerhaeuser Company.

Q. Do I understand by that, then, that you have personal knowledge of the conditions in and about Cloquet to which you testify?

A. Yes, sir.

Q. Something was said in reference to the changes which you have made in the figures you returned to the railroad commission of the state, and also in reference to the testimony given in the Northern Pacific case. Were those changes made after the testimony in that case or were you engaged in carrying on your further investigations both before and after that time?

A. Well, before the Northern Pacific testimony had been taken, I had determined in my own mind that my report should be revised—the report I had made to the state, and the report which we would make here—and as that testimony progressed I had numerous conferences with Mr. Cooper, especially where we went into the same towns, and as to the values of right-of-way, he was making inquiries at the same time that I was in a good many of those towns, and I used all the information I could obtain, both from my own knowledge from outside sources and from conferences with Mr. Cooper in making up these changes.

The MASTER: Was there a reduction or an increase?

WITNESS: There was a net reduction outside of the three terminals. I didn't correct the terminals because I hadn't made those in the first place.

Q. There are a number of smaller towns in the state, are there not, in which you have valued the station grounds approximately at the figure of the rural right-of-way adjoining the town; am I right about that?

A. Yes, sir.

Q. Can you tell us approximately about how many such towns and villages there are in which you have given the country figure for the station ground value or cost of reproduction?

A. There are about, figuring up roughly today, I figure about 117 stations along the line that have approximately just the farm land value placed upon them by myself.

Q. Did you pursue any special investigation as to any of

the larger of the outside towns and cities for the purpose of ascertaining a knowledge of conditions, so as to form your judgment of the cost of reproducing the terminals or station grounds in those places?

A. Yes, sir.

Q. Can you indicate or give the names of some of those to which you gave special consideration? You spoke yesterday, I think, of Barnesville and described rather fully the physical conditions there, and I wish you would give the names of some others.

A. Moorhead was another place that I visited, and I interviewed Mr. Lew Huntron, President of the First National, I think it is; he is a bank president there at Moorhead; and Mr. Evans, who was the assessor, and the members of the Wheeler Land Company; and I went over the station ground myself, and then I went to the records and looked up some of the transfers there recently, all to verify the market value which they had placed upon it; and the result of all those investigations led me to place the market value and the right-of-way value on the property which I have embodied in this return. Crookston was another town which I visited personally, went over the station grounds, and finally employed Mr. M. E. Kirsch, who was recommended to me as a man who had a large knowledge of real estate values, having been assessor one or two terms and who is now engaged in valuing property for a building-and-loan association; so that I considered he would have accurate knowledge of right-of-way values, and after receiving his report on the value of the station grounds, both at Crookston and at Redland yard, I talked with Mr. R. A. Wilkinson, who has been right-of-way and tax commissioner of the Great Northern and whose home was at Crookston for many years, and the result of that conference and Mr. Kirsch's figures and my own knowledge and judgment are the bases from which I have made the valuations in this report. At Benson,—I personally visited

that city and ascertained the assessed value of the lots along our station grounds, and interviewed real estate men and bankers as to their judgment as to the value of the property, and used that as a basis for making this valuation. At East Grand Forks I also went over the ground and employed Mr. T. A. Sullivan, who was recommended as the best-posted man on real estate values in the city of East Grand Forks, being the owner of considerable real estate himself, and asked him to make me a valuation of what he considered our right-of-way was worth as real estate without improvements, which he did, and after receiving his report and as the result of my own investigation, I reduced the value I had already placed upon that valuation which now appears in this cost of reproduction. At Fergus Falls—I visited that place also, and walked over the station grounds, and employed C. E. Baker, who is in the real estate business at that place, and who had negotiated for some purchases of right-of-way for us at different times, to give me his best judgment as to the value of our property as real estate. He did so, and as a result of that appraisal and my own judgment I made the report I have done. At Maynard and Raymond and Clara City I had appraisals made by the Spicer Land Company of Willmar, who are the townsite owners of the three towns—that is, the unsold portions of them—and obtained from them their estimate of what they considered the right-of-way was worth, based on the value of town lots unimproved, and from that report and my own judgment in passing through these towns, but not stopping over, I made up the appraisal I have done. I had some investigation made at Pipestone and Hanley Falls, which I used in connection with my own judgment in fixing the values for this appraisal. At Willmar,—I have been at Willmar a number of times and have gone over the ground on foot, and from the purchases we have made there from time to time and the values I obtained from real estate men and others as to town-lot values I made the appraisal I

have in this estimate, and I reduced the figures somewhat from those given to the state railroad and warehouse commission. At Grand Rapids and Hibbing,—I have been at both those places within the last two months and have gone over the station grounds personally and I had one of our right-of-way men, Mr. T. C. McLean, make a personal examination and interview real estate men and others and get the consensus of opinion as to town-lot values, and from those figures and my own judgment I have increased the valuation in both of those places to the figures which are shown in Ex. 10. At Sauk Center—I visited that place personally and walked over both our own right-of-way and the Northern Pacific right-of-way and was directed to Mr. J. F. Cooper as the man who handled most real estate in the city, and from him obtained an estimate of what he considered lots adjacent to our right-of-way worth, and also the unplatted ground within the city limits, and from that appraisal and my own information, obtained from going over the ground, I increased Sauk Center to the figures which I have in this appraisal. At St. Cloud—I personally visited the records there, got the assessed value of adjoining lots, ascertained from the records some transfers within recent years, and then had an appraisal made by a local man, Mr. C. A. Gilman, who was also familiar with values in Sauk Rapids. He made an appraisal in Sauk Rapids, and made an appraisal for me at St. Cloud in which he got the assistance of other people who were familiar with land values and lot values also. At Melrose—I personally visited that town myself, went over the ground first on foot and then interviewed the president of the First National Bank, Mr. William Bohner, and got him to give me on my blue-prints the prices which he estimated lots were worth without improvements, and also got the opinion of Casper Shaner, who is cashier of the Borgerding Bank, and after obtaining the information from those gentlemen I went and saw the assessor who had made the last assessment, Mr. J. J. Salfering, and got from him the

figures which he had assessed the same property which these gentlemen had valued, and his assessment was based on one-half the actual value of the property. I found a very close percentage between the assessor's valuations as to full value and the valuation placed by these gentlemen upon the property. And from that conference and my own judgment I raised the value of the station grounds at Melrose to the figures which I have placed in this estimate of cost of reproduction. At Cloquet I had my own judgment as to conditions there, having been through the town once or twice since the first of the year, by train, (without stopping over, though); and at Carlton I had a knowledge of the values based somewhat upon the prices we had paid there for right-of-way, and from that I made the estimate of cost of reproduction which I have done. At Litchfield, in addition to having been there a number of times and passing through frequently on trips west, I had a pretty fair idea of values in that city, but I had Mr. P. Hanson give me some of his valuations, also, and from that I have made up the value of the Litchfield station ground which I have returned. At Wadena, we had placed a value on our station grounds which was excessive; and I went there personally and went to the records and got the assessed value of lots in the town, both on the Great Northern and Northern Pacific rights-of-way, and then had the Murray Land Company make a careful estimate of values of town lots adjoining our station grounds on both sides, and also the farm-land value, and from those I made an estimate of what the cost of reproduction would be of the station grounds at Wadena.

Q. And you materially reduced the figures you have shown in the report to the State?

A. At Wadena; yes, sir.

Q. Proceed.

A. At Fridley we had a value of $3,000 an acre for station grounds, which was not justified by the present conditions, and

I made a personal examination of that and also made an inquiry on the outside as to the value of land in that vicinity, not for right-of-way, but in large tracts, and I obtained from the E. G. Walton Company, who are dealers in land in the neighborhood of Columbia Heights, prices which were $200 per acre for lands in large tracts. I had, two years ago, I think it was, sent Mr. W. H. Boardman, a real estate man in Minneapolis, to the neighborhood of Fridley to ascertain what he could obtain certain land there for which we had in mind for a yard. His report at that time was from $150 to $200 per acre, in considerable size tracts. I therefore reduced the right-of-way value of the Fridley station to $600 per acre, based on three times the average value of farm lands in that vicinity.

Q. In these towns and villages, what is the ordinary size of the city lot? is it a fifty-foot lot?

A. Well, that varies; most of the towns are 25 feet by 125, but there is no rule.

Q. How many 25-foot lots would there be in an acre?

A. Well, I have estimated in making my appraisal ten lots to the acre; there are more than ten lots in a full acre, but there ought to be something allowed for streets and alleys, so I estimated ten twenty-five foot lots or five fifty-foot lots to the acre.

Q. And these town values and town right-of-way reproduction costs are on the basis of acres, as shown in your exhibit?

A. They were reduced to acres; yes, sir. I might say, further, Mr. Holden, that at the city of Morris I based the value of right-of-way through our station ground somewhat upon a sale which we had made to certain citizens of Morris in 1899. We sold six acres of our original station grounds, in the business part of the city at that time, for $10,000, being at the rate of $1,637 an acre. I think you will find in the estimate I have of Morris $1,800 an acre straight through there, estimating that that value is perhaps more now than it was in 1899.

Q. Well, $1800 an acre is your railroad cost value and $1400

is in the column entitled "average market value."

A. Well, the strip I speak of was through the main part of the town, and the station ground extends a little beyond that, so that it would not be fair to assume that the entire station ground was of that same value; and that is true of all those towns, the business part is the most valuable part, does not extend the full length of our station grounds.

Q. Well, in fixing your value, have you taken that fact into consideration?

A. Yes, sir.

Q. Now, have you in your records and files all of the details of the opinions and investigations you made in these different towns concerning which you have just been testifying?

A. Where I got the opinions of other persons, yes, sir; and where I went on the ground myself and tabulated them I have those.

Q. And any of that can be produced if called for in this case?

A. Yes, sir.

Q. Now, I notice in looking through your Ex. No. 10 that in the towns the spread between the railway reproduction cost and the average market value varies, in some cases it seems to be three times and in some cases, (as, for instance, at Morris,) the market value is $1400 and the railway value $1800—a much less percentage than three; will you explain just how you arrive at that difference in those towns?

A. Well, that is really a matter of my own judgment, Mr. Holden. I didn't have any rule to go by, but it was simply what in my judgment I ought to place as the difference between the right-of-way value and the market value, or vice versa.

Q. Well, then, to what extent did you give those different towns individual consideration in determining what it would cost to reproduce the right-of-way through those towns, or did you apply any fixed or certain rule to all of them?

A. No, I didn't apply any fixed or certain rule to the percentages in those towns, but having ascertained the value of certain places I then compared the other places of a similar character or size or importance with those, and assessed them as nearly as I could in my own judgment about the same value.

Q. Well, did you have in mind the location of your railroad in each town?

A. Yes, that had a bearing on it; if the business of the town had grown up close to the railroad, I probably put a less percentage on than I would where the town was scattered.

Q. You mean you made the spread less between the market value and the—

A. And the right-of-way value.

Q. Why is that?

A. Well, I think there would be that difference, because property is valuable for any purpose where there are businesses established, and I don't think we would have to pay as much more in proportion in those places because the property could be used for other purposes; but where we run through a town and it is scattered, and it becomes nearer the value of right-of-way through country districts, I think that is about as near as I can explain my method. It is a matter as I have said, of judgment on my part.

Q. You testified that you, as a part of your experience, had been called upon from time to time to figure out the cost of obtaining right-of-way for projected lines or extensions; did I understand you to mean that was done not only in the state of Minnesota, but in other states through which the lines of this Company run?

A. In any case where we are going to build a new line, I think the first question is, "What would you estimate the right-of-way will cost?"

Q. What I meant was, did I understand your answer correctly that you had had that problem before you both in Min-

nesota and in other states as a part of your experience and duty as a right-of-way commissioner for this company?

A. Yes, sir.

Q. Now, to what extent does a proposition of that kind differ from the proposition you have had before you in making up these figures?

A. Well, it is a condition which is absolute; we know that there are farms there, and we know that there are towns there, and we have to estimate what it will cost to buy through those farms and through those towns; and that is on the basis that there isn't any railroad there.

Q. You find actual conditions and actual improvements on the ground that you are after or intending to acquire?

A. Yes, sir.

Q. Do you find actual conditions of severance damage and other elements of that kind which are to be taken into consideration in estimating the cost of reproducing a certain right-of-way?

A. Yes, sir.

Q. Now, then, Mr. Hayden, from the investigation that you have testified to and the consideration you have given to this subject, are there any changes which if you were making this return to the Company you would make in your figures as shown in your exhibits 9 and 10?

A. I have gone over these estimates very carefully and have made what I consider is a conservative estimate of the cost of reproduction in my own mind; I doubt very much if I could reproduce the properties shown in that schedule 10 for the amounts given in the estimate; I would not feel justified in reducing that even for an estimate to our own board of directors if I was asked to make an estimate of cost of right-of-way on those lines.

RE-CROSS-EXAMINATION.

By Attorney General YOUNG:

Q. Mr. Hayden, as a general proposition, the cases where you have made a lower valuation in these schedules that you have offered here in testimony than the valuation in your return made to the State are cases where the value of the property in the vicinity had come up in the trial of the Northern Pacific case?

A. No, I think that is not true; in fact, I know it is not true, because the Northern Pacific does not touch very many points at which the Great Northern touches, and they run in different parts of the state.

Q. Well, you haven't made very many reductions either, have you?

A. I have made a great many reductions; yes, sir.

Q. You spoke of one at Fridley?

A. Yes, sir.

Q. What did you return that at to the State?

A. I returned it at $3,000 per acre.

Q. And you found that the Northern Pacific had put what value on their property there?

A. I don't think the Northern Pacific valued Fridley as a station.

Q. Didn't they have a return as to the value of some property in that vicinity?

A. They had a full return as to the right-of-way value through that place, but it was not spoken of specifically.

Q. After that testimony was given you have returned here a valuation which is only one-fifth of what you had declared the property to be worth before?

A. As I stated before, I went through the entire report.

Q. Well, answer the question, will you, Mr. Hayden; is that true?

A. It is true that I reduced the value in this estimate from the estimate returned to the State from $3,000 an acre to $600, and I stated the reasons why I had done so.

Q. Well, I think you have given the reasons to your counsel. You were asked to furnish the State with a statement of the value of right-of-way and terminals on your line from Thief River Falls to Greenbush in 1906, were you not?

A. Yes, sir.

Q. The road had then been just recently constructed?

A. Constructed in 1904, I believe, the grade.

Q. At the time your report was made to the State the road had been but just completed and put into operation?

A. A short time; yes, sir.

Q. The information was ready at hand as to the actual cost as well as the actual value of the right-of-way and terminals on that line?

A. Yes, sir.

Q. The actual cost of the right-of-way and terminals on that line was $19,255, was it not?

A. Those are the figures which I have presented.

Q. According to your own figures as given to us yesterday?

A. Yes, sir.

Q. You returned the right-of-way and terminals on that line in your report to the State at $93,675, didn't you?

A. Yes, sir; which was excessive, as I found later.

Q. And you have put them into your appraisement in this case at $50,894?

A. Yes, sir.

Q. There are a great many instances where you made no change between your return of value to the State and your return of values here?

A. That is true.

Q. I think you stated this morning, in answer to a question propounded to you by counsel for complainant, that the reason

why you put into your return to the State and your estimate of the cost of reproduction in this case a value of the right-of-way and terminals on the branch between Thief River Falls and Greenbush at a figure so much above the actual cost, was because the farmers in that vicinity had drained their land since to some extent and had made some other improvements which you thought justified your estimate?

A. Yes, sir.

Q. Counsel for Complainant also asked you about testimony you gave yesterday, in which you said in effect that the building of improvements upon rural land by the owners thereof did not in fact change the value of your right-of-way at all, but that for the purpose of an estimate of this kind you did take the value of those improvements in and made the added value which they gave to the land on which they were situated the basis for your computation?

A. I thought I had made that clear that the added improvements didn't increase the value of our right-of-way strip for railway purposes, but for the cost of reproduction at any time it did make some difference.

Q. If it didn't increase the value of your strip of right-of-way for railway purposes, for what purpose did it increase its value?

A. It increased it as farm land value, as value of improved land, but didn't increase the value of our strip as railroad right-of-way for the use of the railroad itself.

Q. It couldn't, could it? it couldn't possibly affect it?

A. Except if you were making a cost of reproduction after those improvements had all been made you would have to allow a greater sum than before the improvements were made.

Q. Is there any possible theory, Mr. Hayden, upon which an estimate of the cost of reproduction could be justified except for the purpose of determining what rates the railroad should pay?

A. I think I have stated that I have not taken the rate question into consideration at all in making up these estimates.

Q. Is there any other possible purpose, Mr. Hayden, for which a proceeding of that kind could be justifiably undertaken?

A. I don't think I am competent to answer that, General.

Q. Can you think of any purpose for which it would be even a sensible thing to do outside of determining what the rates ought to be?

Mr. HOLDEN: I object, if your Honor please.

The MASTER: Oh, the witness may answer if he can.

A. I don't think I could answer that question at all.

Q. Were you told what the purpose of the undertaking was by the Company when you were directed to commence it?

A. I was asked to make a value of the cost of reproduction of our property as of a certain time, and my understanding was it was made for the purpose, in this particular instance, of submitting evidence in this hearing.

Q. And you were also advised or surmised that the Company were objecting to a reduction of rates, were you not?

A. That was my knowledge acquired from various sources. I was not told that by the attorneys for the Company.

Q. Well, you have begun to suspect it since you have come into court that that is what they are doing?

Mr. HOLDEN: We will admit it, General. We will admit it.

Q. Now, it is true, is it not, Mr. Hayden, as an actual fact, that when a railroad is built into a new country, rates for transportation are fixed upon it with a view to paying a reasonable income on what the structure cost; isn't that correct?

A. I take it that in any railroad enterprise the people who are building the line expect to get enough revenue out of it to pay for the cost of building and something besides; otherwise they would not go into it.

Q. Railroads, in other words, are not eleemosynary undertakings?

Mr. HOLDEN: We admit that, also.

Q. They are constructed and undertaken, the same as any other business enterprise, for profit?

A. Yes, sir.

Q. You do know, do you not—you are a practical railroad man—that rates are fixed upon the road when it is finished and put into operation that, in the opinion of those operating the road, will pay a reasonable income on what the enterprise cost?

A. That is true.

Q. That is true.

A. Not only what it cost, but also something besides, I think.

Q. Something besides; that is not unreasonable either. But the effect of the construction of a railroad upon any locality, especially in a new country, is to cause the country to rapidly increase in population?

A. I think that is the tendency in a new country; it is not always the tendency in a well-settled country.

Q. The tendency of the effect of the construction of a railroad is also to cause the country to be built up and improved somewhat—a better class of buildings erected, and a character of greater stability given to the country through which it passes, isn't that true?

A. I think that is true in this country; yes, sir.

Q. The increase in the population and the improvement in the extent and methods of the cultivation of the land produce more business for the railroads?

A. Naturally.

Q. And it is the ordinary expectation of the common citizen, is it not, that as the business of a railroad increases its rates will be reduced instead of raised?

A. I think it is not only the expectation, but I think it has been the experience of most communities.

Q. If every improvement that is made in the country through which the road passes is to be taken into account for

the purpose theoretically of increasing the cost of the railroad, the inevitable consequence would be would it not, that rates should be raised instead of lowered, to compensate the Company for the increased value of its property?

A. Well, as I said before, I have not gone into the theory of the question of rates and the cost of reproduction; I do know that if you are making an estimate or anybody is making an estimate, (any intelligent person,) as to the cost of reproduction, they would make it greater when the land is all improved and the towns all built than when everything is wild and the towns have no more than just started.

Q. As a matter of fact, when you come right down to its last analysis, this theory of reproduction is purely imaginary and is impossible?

A. No, I don't say that it is impossible. It is certainly imaginary because—

Q. Certainly imaginary. In other words, you can't sanely assume a thing not to be in existence which is in existence, can you, and make calculations upon the supposition that a thing is not in a certain locality when in fact it is there?

A. Well, I think we have done that, and I think—

Q. You have done it in those tables?

A. I have done it in those tables, and I think I am justified in assuming those conditions for the purpose of the cost of reproduction.

Q. If such an undertaking was justifiable under any circumstances, I presume, Mr. Hayden, that your method is just as sane a method as any other. Outside of right-of-way and terminals of a railroad, it is possible, is it not, to make a computation of what the construction of the road or the equipment of the road would cost, by comparing it with actualities instead of going into the domain of the imagination?

A. Yes, I think the estimate of the cost of reproduction of the physical property outside of real estate is a much simpler

proposition than the real estate.

Q. You can easily tell, for example, what the reproduction of the equipment would cost, by taking the market value of equipment of that kind and then making proper allowance for depreciation, if there is any, in the equipment that you have in mind?

A. Yes, I think that is a reasonably accurate computation to be made.

Q. And a very simple one?

A. Well, whether it is simple or not—

Q. It isn't difficult at least?

A. It is not difficult.

Q. You can tell what the market value is of the equipment at any time and compare that with the equipment that you have got?

A. You can compare it with the market value of equipment now, of course, because that is a matter of market record.

Q. It is only when you reach the real properties that this method of undertaking to state what reproduction would cost carries you entirely into the domain of the imagination?

A. Well, it is a matter of judgment and experience, and that is about all you can say.

Q. How could there be judgment or experience about a thing which never was done?

A. Yes, but—

Q. —and never could be done?

A. —a person has experience in buying right-of-way in certain localities under certain conditions, and in order to make a cost of reproduction you would have to assume something to start from; assume that the conditions (or I have) are as they exist today in the farm lands adjacent to the right-of-way and as they exist in the towns and villages as we find them today, and we make that our basis for a computation of what it would cost to get a railroad right-of-way similar to ours in approxi-

mately or practically the same location. It is an estimate, it is an approximation; that is all anybody can say of it.

Q. But you are not proceeding along natural or actual lines at all, your railroad—you are imagining it not to be there; that is the foundation, is it not?

A. Well, in order to reproduce it you have to imagine—

Q. Well, is that so, or is it not? I don't care about your explaining everything. Answer it yes or no.

A. Well, I don't know that I can answer it yes or no.

Q. Well, do you assume that your railroad which *is* upon the property which you are passing over isn't there?

A. You have to assume that it isn't there in order to get the cost of reproducing it.

Q. Well, now, you could answer these questions a good deal more directly, Mr. Hayden, and omit some of these digressions and we would get along a good deal faster. You say that there are some stations where you have applied only the rural value to the station grounds; there are upon your system in the state, you said, about 117 stations where you applied this value of rural property with the multiple added?

A. Yes, sir; I think that is approximately true.

Q. Well, those are cases where there is no village and where the conditions are absolutely rural about your stations?

A. That is true; there is no considerable village nor even any considerable settlement.

Q. Now, as a matter of fact, your station grounds as a rule cost you less than your right-of-way; that is, an equal number of acres of station grounds would cost less than an equal number of acres of right-of-way, for the reason that the establishment of a station is considered a benefit to the adjacent land, while the taking of land for right-of-way is a detriment?

A. If you figure first cost—

Q. That is true, isn't it?

A. That is very likely to be true, yes.

Q. So that instead of enlarging your station grounds or even calling them of the same value as the rural right-of-way in cases where there is no nucleus of a settlement, no village or nucleus of a village, they should have been put in at less, should they not?

A. No, I think not, because most of the stations at which we have applied only the farm-land value have been established for a great many years and there has been no town and probably will not be any town around them, and we have had to pay just as much for what we bought for that class of station grounds as we did for the right-of-way.

Q. And in many cases the grounds for stations are given to the Company, are they not?

A. They are in some cases on new lines, where we can get people to put in stations. There are other cases where we buy the lands outright and then sell the right to put stations there to other parties.

Q. And there are many cases where you buy the land outright and plat a village and sell lots and make a very big thing on it?

A. The Company has, in former times, platted a great many villages, yes, sir; but that is aside from the right-of-way.

Q. Well, that includes the right-of-way through the tract that you habitually or generally buy in those cases?

A. In those cases the right-of-way in recent years has been charged up to the right-of-way department, the cost of the purchase of the entire tract of land; the right-of-way portion has been charged up to right-of-way and the balance to real estate, or town sites, or whatever it might be.

Q. I notice by your exhibits you gave the value of your right-of-way in the village of Morris at $1,800 per acre.

A. Yes, sir.

Q. How many acres of right-of-way have you got in Morris?

A. That is on section 4. 33.60 acres.

Q. Morris is a village of about 2,000 people, in Stevens county?

A. The census of 1905 gives Morris 2,003.

Q. How much of your right-of-way is situated in the business part of the town?

A. Well, I should think about six or seven blocks, perhaps.

Q. That is, the town is about six or seven blocks; how wide is the business part of the town all together?

A. You mean in extent?

Q. Lineally. Half a mile?

A. I should say about a half a mile, yes.

Q. There is not over three blocks in length in the village of Morris where property is at all valuable, is there, for business purposes?

A. That is, the highest priced property probably does not extend more than three blocks.

Q. The largest part of your property is entirely outside of that region, isn't it?

A. Well, there is some of it outside, and there is the full width of it right through the very heart of the town.

Q. And the full width of it running away west of the town to the station, about a quarter of a mile away from the business portion of the village?

A. It runs out some distance each side of the center of the business part.

Q. The station is so far away that busses run from the hotel to the station. In counting in a value of $1800 per acre, you have taken the entire yard at Morris, haven't you—the station grounds?

A. Yes, that takes in the whole station ground.

Q. Farm land around Morris is selling for about $40 to $50 an acre, isn't it?

A. I have there $35 an acre, farm land value.

Q. About $35 an acre. Outside of about two or three acres

in your yard in the central part of the town, the land is of no value except for agricultural purposes, is it, if the railroad were taken away?

A. Well, I think it would be valuable for additional residence property; yes, sir.

Q. Well, you don't pretend to say that outside of two or three acres there in the central part of the town your property would be worth anything like $1800 an acre in Morris?

A. No, I think the property right in the center of the town is worth a great deal more than $1800 an acre.

Q. You think it is worth a great deal more?

A. Yes, sir.

Q. What makes you think that?

A. Well, I think if we had to go and buy our right-of-way through the town of Morris, as we are located there now, we would have to pay more than $1800 an acre through the business part.

Q. How many acres would you want there through the business part?

A. I take it we would want what we have there now.

Q. But if you were building through there and they wanted any such price as that, you would build to one side, wouldn't you, where you could get it for practically nothing?

A. Possibly. In this we are estimating that the line is to be as it is now, where it is now.

Q. But you don't want to look candid and say that you think all your right-of-way in the city of Morris is worth $1,800?

A. No, I say that is about an average price that I should place on the entire station ground. Morris—

Q. What did it cost?

Mr. HOLDEN: Let him finish his answer.

WITNESS: Morris is one of the places I didn't visit personally, and I explained this afternoon how I arrived at that value of $1800 an acre, by the sale we made of a strip six blocks long,

in 1899. That had a bearing on the price I placed on the station-ground value.

Q. That block that you sold was right in the heart of town, wasn't it, and is now built up to business blocks?

A. Yes, it has been since.

Q. And that was the only part of your right-of-way that had any essential value as municipal property or urban property?

A. No, I think that the other parts of the right-of-way there adjacent to that had the same value surely.

Q. How long are your yards there?

A. I don't remember exactly; I couldn't say, I haven't been there lately

Q. A good part of your yard there is outside of the platted portion of the town, isn't it?

A. I think that is true; yes, sir.

Q. And has only a value as farm land, outside of its use for a railroad?

A. The extreme ends of it; yes, sir.

Q. But you have applied this value of $1800 per acre to 36 acres, wasn't it?

A. I think that is true.

Q. And that valuation is just as fair and reliable as the others, except in those few towns where you say you visited the towns, is it?

A. Well, as I stated before, I have made up the entire estimate on my best judgment.

Q. Well, have you got any judgment on property that you never saw?

A. Well, I have seen this in passing through it on the train, General, a good many times.

Q. Can you ride through a country on a train and tell what property is worth?

A. I think I couldn't tell by riding through the country on a train what it was worth, but I have a fair knowledge of the char-

acter of the country and the character of the town and the business portion of it; I would have some idea of values from what I know of other places.

Q. Well, if you find rural land immediately outside the boundary of a country village selling at $35 an acre, don't you think that it would require considerable faith on the part of your hearers to believe you when you say that your land extending both outside and through a little town about three blocks long is worth $1800 an acre?

A. That would depend upon the amount of the value there was in the portion through the three blocks of the city.

Q. In answering Complainant's counsel this afternoon about values in certain localities, you gave some instances where sales had been made, some of them a considerable number of years ago; why did you do that? was that in order to bolster up your estimate of value in these tables?

A. Let us see if I understand your question; was that sales of what—

Q. Sales of land, such for example as a sale of a portion of your right-of-way from Sauk Rapids to Minneapolis to the Northern Pacific Company.

A. Yes, it was for the purpose of showing that the valuation which we have placed upon our section No. 12 is not excessive.

Q. If you considered that an individual sale made in 1883 had any bearing on present values, why didn't you examine the sales made in other localities between that time and this?

A. I don't know of any other sales similar to that any place in this state.

Q. Well, the relations between your Company and the Northern Pacific are particularly close and confidential, aren't they?

A. They are now, but they were not at that time.

Q. They were not at that time?

A. No, sir.

Q. Who negotiated that sale, who was instrumental in bringing it about, on behalf of either company?

A. Well, that was before I came with the Company, General, so I can't say of my own knowledge.

Q. When we find one company selling a part of its right-of-way to an alleged rival company so as to enable the alleged rival company to build a parallel track for a distance of 53 miles, it looks, does it not, as though the companies were not very hostile towards each other, and that probably the negotiation for that sale was quite a friendly one?

A. My information is in regard to that sale that the Great Northern Company, or at that time the Manitoba Company, and the Northern Pacific had been extremely hostile to each other for a number of years, and they had both been building lines cutting into each other's territory—what they claimed to be their territory—and that about 1883 there was an agreement made between the companies to exchange certain branch lines and stop the building of lines where they were not necessary. That is my general information.

Q. And this deal was a part of that transaction?

A. A part of that transaction, but the consideration is the actual consideration at which that was put in.

Q. Was this a cash consideration, or a consideration involved in a trade or exchange of property?

A. I am not informed as to that, but the records will show.

Q. But this sale was to be the cementing of their subsequent friendly relations?

A. No, I wouldn't say it in that way, because they were not friendly for a great many years after that.

Q. Can you furnish us the records of your Company showing that $77,000 was paid for that right-of-way to your Company?

A. I can ascertain what the records do show.

Q. I wish you would do so. You also mentioned another particular sale which you also referred to yesterday, which was

a sale between the Great Northern Company and one of its principal stockholders, Mr. Weyerhaeuser, in Cloquet?

A. Yes.

Q. If you considered that actual sale as a basis upon which to furnish an estimate, why didn't you consult other sales at about that time?

A. Well, I think I did, in the case of Carlton and in places where I knew what the actual consideration was; and Virginia was another place. I took all those things into consideration, but I didn't make that a basis of my report except in places where I felt justified in doing it.

Q. Well, you referred to a few of these particular sales where they seemed to be favorable to your theory of valuation, and I notice you didn't give sales in other cases, and told me yesterday that you didn't consider sales made more than five to eight years ago had any bearing whatever upon the question.

A. I don't think they have very much bearing, except I do think in the case of Cloquet, which was a recent sale and where the conditions are about the same today as they were then, it is fair enough to consider that, and I still think so.

Q. Do you know anything about how that sale came to be made between Mr. Weyerhaeuser and your Company?

A. I do know, because I helped negotiate for it.

Q. You also referred to some recent sales of some small amounts of property on Rice's Point as bearing upon the value of your right-of-way there, and mentioned, in answer to a question by Mr. Holden, that the prices paid in those sales were higher than the prices which you give for your right-of-way on Rice's Point?

A. Yes.

Q. Did you not?

A. I did.

Q. I asked you yesterday, if I remember aright, what you paid for your right-of-way on Rice's Point, did I not? if not I desire to ask it now.

A. That can be given if you desire; I haven't the information here.

Q. Well, don't you think, Mr. Hayden, that if you are going to refer to some sales of property up there for the purpose of fixing value you ought to give us the benefit of knowing what you paid yourself for your lands?

A. If you desire it I can give you the information.

Q. I would like to have it. You also spoke about the extra property adjacent to the union station in St. Paul and the price that was paid for it as another verification of your method of estimating values. Now, don't you think it would be fair under those circumstances to give us what you paid for the other property owned by you down there, if you are going to determine it by a sale or a purchase, and will you furnish us the information?

A. I will give you the information if you wish it.

Mr. HOLDEN: What other property do you mean?

Attorney General YOUNG: Well, all the other property down there in the yard affected by this.

WITNESS: That is subject to our attorneys, of course.

Mr. HOLDEN: The General, as I understand, wants what we paid for all the other terminal property. The witness stated yesterday, and I state now again, that we can't show that; a great deal of that property was a part of the original terminals of the old St. Paul & Pacific, and we have no records and no means of ascertaining what that cost us. Anything our records may show to them, they are perfectly welcome to examine, but—

Attorney General YOUNG: I understand you are having the records examined with a view to ascertaining how much information you have on that subject?

Mr. HOLDEN: We are, but we know the fact that as to the cost of the St. Paul & Pacific property and for some subsequent years we haven't any records on that subject.

Attorney General YOUNG: Until they have made that exam-

ination I think I will withdraw this request.

Mr. O'BRIEN: You can give us, I suppose, in making that examination, about the time of the acquisition of these different properties; for instance, a strip of right-of-way in certain territory acquired at a certain date, "no record of its cost," so that we can consider then whether we can make an estimate?

Mr. HOLDEN: Well, we will give everything that our records show and endeavor to identify those that are not shown.

Mr. O'BRIEN: Yes, I have no doubt we can agree on that.

Attorney General YOUNG: That is all right.

Q. Now, let me ask you, Mr. Hayden, whether that property on Third street adjacent to the union station which you stated your Company had purchased and which you have put in here as a part of the property upon which rates are to be computed, is not now occupied by tenants?

A. That is true, and the leases all expire this year.

Q. And you don't know whether they are going to be renewed or not?

A. I couldn't say, but I don't imagine they are.

Q. Well, that is in the wholesale district in this city?

A. Yes, sir.

Q. And the property is occupied by valuable business houses, business blocks?

A. That is true.

Q. Suitable for business purposes?

A. Just the business as we found it there; yes, sir.

Q. And it is not being used for railroad purposes at the present time?

A. It is not, but it was bought for the purpose of use in the near future, in the immediate future.

Q. As soon as it is devoted to railroad purposes it will be proper to be put in as railroad property, will it not?

A. Well, I have put it in this estimate for the reason that it is there alongside of the other property of our Company and

bought for railroad purposes, and I have assumed for the purpose of this estimate that it is railroad property, but the conditions are as you have stated.

Q. At present, and for all the time since your railroad was built, that is, while it has been used at all, it has been used for business purposes, part of it for wholesale establishments and is so used now?

A. That particular block between Sibley and Wacouta.

Q. And is paying rent as private property to your Company?

A. Yes, sir.

Q. You would not want the Company to get an income out of that by way of rent and also have the public pay for transportation profits on the same property, would you?

A. I think as a matter of accounts that could be adjusted, as to rentals and earnings.

Q. Well, wouldn't it be time enough to put that in as railroad property when the Company concludes to use it for that purpose?

A. Well, any property which we have acquired for immediate or near use as railroad property, I have assumed is railroad property for the purposes of this estimate.

Q. There is nothing to show is there, that this property was ever intended for railroad property and nothing to compel the Company to ever use it for railroad property?

A. No, but the condition in the railroad yards there and the depot is notoriously cramped and inadequate, and that is the only outlet we have, the only chance we have.

Q. That is the property of the Union Depot Company?

A. It is Great Northern property, too; that is, the exclusive property which they have there in that strip.

Q. But this property was not acquired by virtue of the power of eminent domain, but was purchased as a private undertaking and is still maintained as a private investment?

A. It was purchased as commercial property through outside agents, and at the present time is still used for commercial purposes.

An adjournment was here taken until Friday, March 26, 1909, at 10 o'clock A. M.

Federal Building, St. Paul, Minn., Friday, March 26, 1909, the hearing was resumed at 10 o'clock A. M.

OSCAR L. TAYLOR,

sworn on behalf of Complainants, testified:

By Mr. How:

Q. Your name is Oscar L. Taylor and you reside in St. Paul?

A. I do.

Q. And how long have you resided here?

A. Since 1882.

Q. In what business are you engaged?

A. In the real estate business.

Q. How long have you been in that business?

A. Since I came to St. Paul, in February, 1882.

Q. Has the character of your business during that time been substantially the same? I don't mean with regard to volume, of course, but I mean the general nature of it.

A. Yes, the general nature of it to some extent has been in the same lines, going through the ups and downs of the period.

Q. And what has been the character of the business?

A. I have done a general real estate business.

Q. And that has consisted in what?

A. Buying and selling, both on individual account and for other people, of city property; that is, St. Paul property almost wholly; some outlying property occasionally, but my time having been devoted very largely to the handling of St. Paul property.

Q. You mean by St. Paul property property within the limits of the city of St. Paul as defined by the legislature, or—

A. St. Paul and its environments.

Q. To what extent has the necessity of valuation of properties entered into your business?

A. Well, it becomes a very essential feature for a successful real estate man to be thoroughly informed on the general values of property.

Q. And must his information be continuous, never lapse?

A. Yes, it is a thing that is shifting; the question of values often varies extremely from month to month; at other times the period of fluctuation will be more widely spread out; but in order to have a clear idea of the values of property you have got to keep in general touch,—as close touch as possible,—with the various sales and the various elements that go to make up the values of property.

Q. How extensive is and has been your knowledge of what may be called generally railroad properties in and about St. Paul?

A. I have had quite a lot of experience in handling properties of a railroad character; I have been employed in the capacity of agent by a number of the different railroads, and extending over quite a wide period of time; have been in more or less constant touch with the railroad development and the prices paid by the railroads for different pieces of property.

Q. Have you ever been personally interested in purchasing properties for railway use on your own account?

A. Yes, I have.

Q. And have you ever purchased any such properties on account of railroads?

A. Yes.

Q. One or more?

A. Yes, various.

Q. Have you ever acted for sellers to railroad companies?

A. Yes.

Q. And in how recent years have you had such experience?

A. Well, by experience you mean the general line which we have just discussed?

Q. Yes, either buying for or selling on account of railroad uses.

A. Right up to the present time; that is, comparatively present; within a month or two.

Q. Now, I think in the fall of 1906 you and Messrs. Read and Watson were employed as a commission to appraise the various railway properties within the limits of the city of St. Paul?

A. We were.

Q. Will you state briefly, what the transaction of your employment was, how it came about, and what your instructions were?

A. Along in the fall of 1906 I received a telephone message from Mr. Thomas Cooper, the land commissioner of the Northern Pacific, asking me to come down to his office, which I did, and he told me that their railroad, and likewise the various other railroads of St. Paul, wished to have an appraisal made of their properties in the city. He asked me what course I thought was the simplest way to ascertain the probable value and what suggestions I could make to him along that line. I told him I thought a committee of perhaps three could take the matter up and go carefully over the whole subject and arrive at a fair idea of the value of the property. I suggested to him the names of Mr. W. C. Read and Mr. J. J. Watson, both of whom I knew had had more or less experience in similar lines; and those names being agreeable to Mr. Cooper, I think the next day or very shortly afterward these three men, Mr. Read, Mr. Watson and myself, were asked to meet at Mr. Cooper's office, where we found assembled representatives from the various railroads.

Q. Was there a representative of the Great Northern there, do you remember?

A. I think Mr. Hayden was there.

Q. Among the other representatives?

A. Yes; Capt. Woodman, of the Omaha, and a representative of the Chicago, Milwaukee & St. Paul, and a representative from the Wisconsin Central. The Soo had, as I recall, no representative at that time; for what reason, there was no explanation

given, but it is my impression that there were representatives of all of the railroads owning terminal properties in St. Paul with the exception of the Soo. We had a meeting of perhaps an hour's duration, in which the general subject was discussed as to how we might arrive at a valuation, by what method, whether to divide the various properties up into small or large districts, and a general discussion of how we had better go to work. Finally, having the matter left in our hands to decide as to just what arbitrary divisions of property might be made—

Q. For the purpose of valuation?

A. For the purpose of valuation,—it was suggested by several of the men that they wanted a fair and equitable valuation of the real estate of the various roads. We were instructed to leave out the question of railroad improvements or what money had been expended by the railroads above the cost of the land, but to simply take the value of the terminal properties and the various rights-of-way wherever they existed, and to value them on reasonable and equitable lines.

Q. What intimation was given you as to whether it would be preferable for the railroad companies to have a high or a low valuation?

A. There was no intimation given; in fact, none of us, to my knowledge,—I know as far as I was concerned, I did not know, until long afterwards, to what purpose this appraisal was to be put or for what purpose it was being obtained. Mr. Cooper stated to me (and it is my impression that he stated before the three of us) that this appraisal was made either at the request of the State or for some state purposes, but what they were was not disclosed, and we had no occasion to inquire any more closely.

Q. Was anything whatever said about rate-making?

A. Not the slightest allusion to it.

Q. And did you know whether it would be advantageous to the railway companies to have a high valuation or a low valuation?

A. Did not; it was reiterated several times that they wanted a fair and equitable valuation of the property.

Q. You were instructed to value the railroad properties as naked properties, were you?

A. Yes.

Q. Without reference to the improvements?

A. Yes.

Q. In the same manner, I assume, that if you were called upon to give an opinion as to the value of the real estate upon which the Ryan hotel is situate, you would conceive that that was naked property without the improvements, and value it as such in view of its environment, surroundings and other conditions, merely eliminating that building?

A. Yes, that would be a natural situation.

Q. How soon did you enter upon that work after this conference in the fall of 1906?

A. Very shortly.

Q. What was the method of it, what method did you pursue?

A. Each of the railroads interested, after having given these general instructions, provided us with a set of plats showing their various properties. It happened at that time that I had a vacant floor in the top of the building in which my office was situated, and we used that room as a committee-room had a large table there, and we laid out these various plats. And the first two or three sessions were devoted to a general discussion of the situation, having a desire to as far as possible associate pieces of property belonging to the different railroads into a class of similar value, and before attempting to make any figures we tried to separate certain portions of the Great Northern and Northern Pacific and the Omaha and segregate them into sections showing a close similarity in general valuation. Having arrived, in a general way, as to what proportion existed between the various terminal pieces of property owned by the different roads—

Q. You mean what relation with regard to value?

A. Yes. We thereupon began—I have forgotten now what road we took up first, but we took them one after another, and divided them up into sections, a purely arbitrary division; sometimes, owing to particular surroundings one section might be quite small; another, where the property extending over a much wider area presented practically the same features, that section or subdivision would be much larger; and so on until each railroad was divided up into a different set of sections. We thereupon took up the question of figures for these different subdivisions, and occasionally we would find properties on the Northern Pacific where we had made a certain valuation for a certain section and had made a certain valuation for a certain section of the Omaha where there was a discrepancy—a difference, rather, in valuation—and yet when we came to compare those a little more closely (these two particular sections) the feeling existed that they were entitled to perhaps a uniform valuation, and we would readjust the one or the other; and so on through the general discussion of the entire problem until we had finished up everything, including the Minnesota Transfer, that was brought before us.

Q. Your conclusions were not arrived at, I take it, without discussion as between yourselves, as to what was a proper valuation to put upon these respective properties?

A. No, constant discussion. As I stated, before we made any figures at all, there was a general discussion for a long time on the general question of railroad values and what proportion existed between one and the other, and when it came to taking the Great Northern sections 1, 2 and 3 and along that, each one of the committee would express his particular opinion; and sometimes on a section the opinion of each member of the committee would be different, and we would arrive at a uniform opinion in a way that any commission might.

Q. Did you exchange experiences and bits of information

which you might have with regard to questions bearing upon the valuations?

A. Yes, we attempted in every sort of way to a most complete interchange of individual knowledge, what each one of us had gained during the years of experience of that sort.

Q. Did each of the other members of this committee appear to you at the time to have had experience and to have information with regard to questions bearing upon these valuations?

A. Yes, I knew them both to be experienced men before we started in, and the various expressions of opinion along through the valuations bore that impression out.

Q. Your method of stating your valuation was certain tracts so much per square foot, certain other tracts so much per square foot, without reference in your report to the size of the tract; that is a fact, is it not?

A. We based everything by the square foot.

Q. Leaving it to the railway companies themselves to make the calculations, merely mathematical calculations for the purpose of stating the value of the respective tracts?

A. Yes, and the acreage in the various tracts.

Q. I hand you a paper which has been marked Complainant's Ex. 11-Taylor. Do you identify that as the original report made by you and your associates to the land agent of the Great Northern road?

A. Yes; that is a summary.

Q. Is it either the original or a copy?

A. Yes, it is either the original or a copy.

Mr. How: Complainant's Ex. 11 is offered in evidence.

Q. This report was made approximately when? It doesn't seem to be dated. Along early in the year 1907?

A. No, it was made in the late autumn of 1906.

Q. Oh, it is dated October 1, 1906, valuations made October 1, 1906, at the heading.

A. Yes.

Q. And it was rendered at about that time, was it?

A. Yes.

Q. Now, you have testified in the Northern Pacific case with regard to the valuations made of the Northern Pacific property. Were these valuations made in the same manner and with the same care and at the same time as those that you have testified to in the Northern Pacific case?

A. Yes, we attempted to give the same care and particularity to each railroad.

Q. You have been under cross-examination as a witness in the Northern Pacific case, and perhaps I am right in stating that you have some general information with regard to the testimony that has been given for the defendants in that case other than the railway company, on the question of valuation of real estate, and perhaps you have given considerable consideration or much consideration to this question since you testified in the Northern Pacific case; now, if I state the facts right, I ask you whether or not in your opinion you and your associates have stated the values of the Great Northern properties higher than you think you would be justified in stating them if you were called upon today to state them.

A. I do not think that either myself or the other members of the committee would be inclined to lower the values in the slightest degree.

Q. Did you, or any of your associates, so far as you know, investigate with regard to any of these valuations, the assessments made by the city assessor of St. Paul upon adjoining or adjacent property?

A. In determining our values?

Q. Yes.

A. We did not.

Q. Did you ever, in your real estate business, for the purpose of determining how much you ought to get for property which you had in your hands for sale or how much you were justified

in paying for property which you desired to buy for yourself or another, investigate the assessor's books for information with regard to the assessed valuation?

A. I consider it a wholly unreliable factor, and therefore entitled to no practical consideration in determining upon the value of a piece of property.

Q. I ask you if you ever have in your experience done that for the purpose of forming your opinion as to what property is worth.

A. Only to this extent: in ascertaining the assessed valuation for the purpose of knowing what the annual maintenance cost of a piece of property might be and whether or not it would be a desirable piece of property to purchase, owing to the fact of whether it was taxed high or low, for that reason we not infrequently have access to the assessment; but as far as the determining of value, except from that point of view—

Q. Except with regard to the maintenance charges of the property?

A. Yes—I never give it any consideration.

Q. You have properties in your hands now for sale, have you?

A. Yes.

Q. Have you in mind any particular examples of relation of the prices at which they are for sale to the assessed values as shown on the assessor's books that will disclose how unreliable the assessment method with regard to properties is?

A. Why, I could go on and spend the entire forenoon in illustrations of that kind. We have property—

Q. I think you mentioned one instance yesterday that struck me as rather glaring, property that was assessed much higher than it could be sold for?

A. Yes, I have property in the office that I could sell at something like a fourth of the assessed valuation; and other properties that are for sale at double the assessed valuation; in

many instances very much higher proportions than that exist; such extreme variance existing in all classes of property that it would be a wholly unreliable factor on which to base any valuation.

Q. Is it your opinion that that unfair and unjust variation between assesed valuations and the prices which could be obtained for property in the market is notorious and has been for some years in St. Paul?

A. There has been no careful assessment made since 1896. In certain portions of the city, the property has depreciated enormously, and practically no change made in the assessed valuation. In other directions the property has appreciated, with no change made in the valuations; and all of those various elements have brought about an absolutely unfair assessment, so much so that the public has complained bitterly; they have appealed to the Tax Commission, there have been all sorts of discussions among the real estate men. The real estate board, to my knowledge, have had many meetings on the subject of an assessment, and the strong desire on the part of all the leading real estate owners and operators in the city is to have a new and equitable assessment; it is a crying demand and well recognized throughout the community with every one at all familiar with or interested in real estate.

Q. Now, will you state, Mr. Taylor, generally, just what elements and factors you did take into consideration in arriving at these valuations which you reported to Mr. Hayden of the Great Northern road?

A. There are a number of elements that enter into the appraisal of a piece of railroad property of the size of this Great Northern property in question; no definite rulings or no definite lines can be laid down upon which you can fix an appraisal. There are many elements which enter into it. I should say that one of the strongest elements was that of experience in the acquisition of similar properties. Experience teaches you what

is necessary to acquire a large piece of property like that, and the more experience you have the larger valuation you are inclined to give the property. You take into consideration, to a certain extent, the prices that single, outlying pieces have brought; the prices paid for those pieces of property with which you are familiar that are incorporated in this right-of-way; the diverse elements that enter into the general make-up. But a railroad right-of-way, in a city of any size, becomes a peculiar and individual piece of property, not subject to the general conditions of ordinary sales that single, isolated pieces of property bear in relation to the general district.

Q. Railroad terminal property in the city of St. Paul is topographically limited in amount, I take it? That is, topographical conditions in the city of St. Paul are such as to confine railroad properties within a much restricted area; am I right about that?

A. Yes, certain portions of what would strictly be called terminal properties are subject to those restrictions to a very marked degree.

Q. And the restricted portions are those nearest the important business districts of the city?

A. Yes.

Q. And the nature of the necessary entrances into the city is such as to make the property which can be devoted to them extremely restricted?

A. Yes.

Q. What, if any, influence did that fact have upon your valuation?

A. We took that into consideration as one of the important factors applying to considerable portions of all these terminal properties.

Q. In view of that fact, what if any influence would the price of property outside the district of property available for railroad uses, in a district where it was available for ordinary resi-

dence purposes alone, have upon you in determining the valuation of railroad property?

A. It would have none.

Q. No influence?

A. No.

Q. Let me cite this example: what influence would the sales price, or the price at which property is being currently sold, or has been sold in the immediate past on Dayton's Bluff within an eighth of a mile of railroad property at the foot of the Bluff, have upon you in your determination of the value of the railroad property?

A It would be no element at all in ascertaining the value.

Q. Of what influence would the figure at which the assessor of the city of St. Paul carried the Dayton Bluff property upon his books have upon you in determining the valuation of the railroad property?

A. It would have no influence.

Q. Do you know of any method, of any course of reasoning based upon your experience, by which you could make any such information available?

A. I do not; I think it is an impossible problem to solve.

Q. You have had some experience yourself, in purchasing right-of-way for a railroad property?

A. Yes, sir.

Q. What has been that experience with regard to the enhancement of prices which you have had to pay from time to time as your work progressed? Perhaps you would be willing to state an example, if you have one in mind.

A. In attempting to acquire railroad right-of-way, as long as you can work wholly under cover, without any suspicion on the part of the general public of what the purpose of the various purchases may be, property can be obtained at much lower prices than will prevail as soon as it becomes apparent that a railroad is the purchaser. I have had very many instances of

a wholly different scale of prices; what you pay for one piece of property is no criterion at all for what you may have to pay for the next piece of property of exactly the same character. Those things vary entirely according to the knowledge of the holder of the property and his anxiety to sell. Right in my own experience, within a comparatively short time, for right-of-way purposes I paid $700 for a piece of property which was about five times the size of an adjacent piece for which I paid $5,500. I encounter that sort of experience right straight along all the time, being exaggerated as the thing becomes definitely settled that the purpose for which it is being acquired is a railway use.

Q. What effect in your experience has it had and does it have upon the price of property as soon as its availability for railroad purposes is known to the owner?

A. It sends it skyward.

Q. And for what reason? because the railroad use is a higher use than ordinary uses and lends value to the property?

A. Yes, that is an element; there is always the desire on the part of the selling public to obtain as high a price as possible, and they recognize that the railroads will pay a much higher price for property than the ordinary purchaser, because the railroad puts it to a use upon which it will pay a much larger return than the ordinary purchasers are able to do.

Q. Is it a fair statement of your views upon that that if you can buy property without the owners knowing that it is available for railroad purposes you can get it at a much less price than if the owner does know that it is available for railway use—

A. Certainly.

Q. —and that after the owner finally discovers it is absolutely necessary for the completion of a right-of-way, then you have to pay still a largely enhanced price?

A. Yes, excessive values.

Q. Is it your opinion, Mr. Taylor, that if the Great Northern

property existed as it does now, excepting for the railroad improvements—that is to say, if the Great Northern terminals and right-of-way within the city limits of St. Paul were vacant wholly and unoccupied now, and the other railway properties existed in their present improved condition—you could take the amount of money which you and your associates declare that property is worth today upon the basis of its present cost of acquisition, and purchase the Great Northern properties, if it were in the hands of different owners?

A. I don't think it would be possible to purchase it for the price we set. My idea in making this valuation was to be conservative. I recognized that many of my brother real estate men —I think the other members of the committee will bear me out in it—had no experience in the appreciation of the valuation of railroad terminal properties that some of us had, and knowing that these valuations become public property sooner or later, we all had a desire to be conservative, and, having been instructed to keep within the lines of conservatism, that was a constantly present thought in our minds. Now, there are many districts that were you to go out, as you say, and attempt to buy adjacent property parallel with the Great Northern road today similar pieces, you would have to pay prices decidedly in excess of those which we made in this valuation. That is simply an opinion, because it is not based on anything definite, but with the experience I have had and the attention that I have given the subject I feel very confident that that situation would be found to exist were you to attempt to go out and duplicate much of their property. Some of it could be duplicated undoubtedly for the price because of the fact that there was property so identical, a considerable extent of it lying along side of it; in other places it would be almost priceless, if you really attempted to go out and buy it.

Q. I show you a plat which has been marked Complainant's Ex. 12-Taylor; I ask you if that is a copy of the plat that was

delivered to you by Mr. Hayden and showing the Great Northern properties in the city of St. Paul, and whether it now correctly represents the properties which you and your associates made a valuation of.

A. Yes, it appears to be the same. As far as I can judge, the figures correspond and about the same subdivisions. Right in here (indicating) is a little variation from the figures that we made.

Q. In the plat you mean, or what causes the variation?

A. Westminster street, which is right in here, from Westminster street to Cortland street, which is over here, we had a valuation of forty cents, clear across there; and from here to there (pointing) we had a valuation of twenty-five cents. That is, from Cortland street to Rice.

Q. So that these figures out here do not represent your valuation?

A. No.

Q. But the plat showing the property does?

A. I think so, yes, approximately.

Q. Well, do you know any recent transaction which, in your judgment, justifies any valuation which you have made as shown upon your Ex. 11?

A. Why, only recently, within a very few days, the Soo purchased a corner down on East Seventh street, near the bridge, at a price that would warrant the highest valuations that we have put anywhere.

Q. What property have you in this Great Northern property nearest that property bought by the Soo?

A. That nearest to it would be along the Seventh street bridge.

Q. And how near is that to the property bought for the Soo?

A. Two blocks and a half; each of those blocks being 200 feet.

Q. About 500 feet, then, outside of the streets?

A. Something like that, yes.

Q. What valuation did you put upon the Great Northern property nearest that?

A. $2.50, I think, a square foot; from Sixth street to Grove was $2.50. That is Grove and Seventh here, meeting at the Seventh street bridge; from Grove to Lafayette avenue, $1,—that being almost equally near the property recently acquired by the Soo—within 600 feet of it.

Q. The property recently acquired by the Soo is on Seventh street, which at its junction with Grove you made the division point between your $2.50 a square foot valuation, and $1 valuation?

A. Yes.

Q. There is a building upon that property purchased by the Soo?

A. Yes.

Q. Have you any opinion or any information as to what that building is considered worth?

A. The property, as I understand, sold for about $52,000; the lot, according to my recollection of the plat there (I haven't refreshed my memory) should be 50 by 100, or 5,000 square feet. The building is an old one, has been there for many years; I should not estimate it to be worth to exceed $10,000.

Q. That would leave something over $8 a square foot for the land without the building?

A. Yes, about that.

Q. That was bought probably openly for railway uses?

A. Yes, I think so.

Q. It had to be?

A. Yes.

Q. Under the circumstances of the Soo's acquisition of property?

A. Yes. Now, that is the same price that we set the highest priced property, and no man with any experience at all but what

would say that the property around the present union depot was very much more valuable than that lower Seventh street property.

Q. You set no property higher than $8 a square foot?

A. No.

Q. Mr. Taylor, you recollect some purchases made for the Soo of the old Simpson property, and other properties there in the old Lafayette avenue residence district?

A. Yes.

Q. How is that property situated topographically, as compared with the railroad right-of-way in the neighborhood, is it high or low?

A. Well, it is high.

Q. How high, approximately?

A. How high above the level of the present Great Northern tracks?

Q. Yes.

A. Well, that is a guess, but I should say between 40 and 50 feet.

Q. What is your judgment with regard to a comparison and relation for railway uses of the value of that property and the property down on the level?

A. Well, it costs ten cents a yard at the minimum to take dirt away, and the number of yards that would be required to put that ground on a level with the Great Northern so that it might have access to the Union Station—

Q. —or any other railroad, so far as that is concerned?

A. Yes, or any of the other railroads running through that gully, would materially incerase the actual cost over what they had to pay for the property originally.

Q. And how far is that property from the union depot property and property near there which you appraised at $8 a square foot?

A. How far is this Seventh street property?

Q. No, this property I am talking about, the Lafayette avenue and Woodward avenue residence property; it is over half a mile?

A. Yes, something like half a mile, nearer three-quarters, I should judge.

Q. And how far is it from the active business property of St. Paul?

A. Well, the active business stops on Seventh street today and its nearest point is about three blocks from Seventh street, but starting in saying that there is active business on Seventh street, the activity increases as you go towards Robert, each block becoming more populous and higher priced.

Q. What had been the condition of that property for a number of years prior to its acquisition by the Soo; that is, with regard to its apparent desirability for residence or any other purpose?

A. It had been retrogating in value, from about the year 1885 or 1886, gradually depreciating in value.

Q. Some of our best, most prominent people, used to live in that neighborhood?

A. Yes; Woodward avenue was called Millionaire avenue when I came to St. Paul.

Q. And their houses have been abandoned, they have moved to another quarter of the city, and they are occupied by boarding houses, and for commercial purposes and similar uses?

A. Yes, sir.

Q. Such as had not been razed to the ground, if any had.

CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. Mr. Taylor, you testified quite fully in the Northern Pacific case, did you not?

A. Yes, I think I had about ten or twelve pages of testimony.

Q. And as I understand it, this work was all done at the

same time, all these valuations were made at the same time?

A. Yes.

Q. And under the same arrangement?

A. The same conditions prevailing.

Q. You valued all of the railroad terminals in the city at the same time?

A. We made a valuation on all the properties except the Minnesota Transfer, and we were requested to appraise that, I should say two or three weeks after we had finished up the others. Isn't that about right, Mr. Read?

Mr. READ: Yes, that is my recollection.

Q. I understood you to say that railway property for terminals and right-of-way, occupies a class of its own?

A. Yes, it is not to be compared with ordinary isolated pieces of real estate.

Q. Why shouldn't you compare a right-of-way or a terminal occupied for railway purposes with adjacent property?

A. In the first place, it is put to a different use; the value as based on that use is different. In the second place, it becomes an entire and completed creation; it ceases to be a commodity that is offered in the general market; it is not dependent on the little fluctuations, the temporary stringency of money, the individual necessity of sale, and the various elements that go to make the prices of real estate viewed as an ordinary salable commodity.

Q. Then would you not expect the railroad property to follow the fluctuations of property immediately adjacent to it?

A. Not to any appreciable extent.

Q. Now, we will take the case that you have mentioned—which I presume everybody living here is more or less familiar with—this property in lower town that was occupied for residence purposes a few years ago; Woodward avenue, and down by the old Sibley homestead and Prince homestead; that property at one time was very valuable for residence purposes?

A. Yes.

Q. It ceased to be valuable for residence purposes, and its value went down, did it not, very materially?

A. Yes.

Q. Mortgages for what were supposed to be a small amount of the value of the property were foreclosed and the property sold for the amount of the mortgage?

A. In some instances, I imagine, and as I recall.

Q. And places that were worth many, many thousands of dollars, were put upon the market and rented for a very few dollars a month; isn't that true?

A. Yes.

Q. Now, the railroad property,—this Great Northern right-of-way and a portion of the Northern Pacific right-of-way, immediately adjoined that portion of town, did it not?

A. Yes, it was adjacent to it.

Q. If you had been called upon to value the railroad property during that period, you would not have lowered the value of the right-of-way because of the extreme lowering in the price of the property along Woodward avenue, would you?

A. I don't think I should, no.

Q. So that your judgment is that once property is acquired for a railroad right-of-way, it ceases to possess the characteristics of ordinary real estate in the vicinity?

A. Very decidedly.

Q. It becomes a sort of an operating tool, doesn't it, part of an operating tool?

A. Yes, if in active operation.

Q. Of course we are speaking of a railroad that is in operation.

A. Yes.

Q. That real estate is a part of the machinery of the railroad used for the purpose of operation?

A. Yes.

Q. And its value depends upon the earning capacity of the

railroad considerably, does it not?

A. No, that is one element of its value, but a railroad that might be badly managed or didn't go anywhere, might possess a certain terminal, as the old St. Paul & Duluth in Duluth had very valuable properties there, and yet that short line of road from here to Duluth, might, under certain conditions, not be earning much, but that terminal would have a value just the same as if it was owned by the Northern Pacific, as it is today.

Q. I am not speaking of its actual earnings; I said earning capacity.

A. Yes.

Q. Which would be the rates which it might earn under favorable circumstances?

A. Yes.

Q. The rates which it would be allowed to earn; it doesn't depend upon the conditions at any one time, does it?

A. I don't quite follow you.

Q. That fact doesn't depend upon the conditions of any one period?

A. No, not in a general way; it would not fluctuate as other real estate in the vicinity would.

Q. If it did, as was pointed out by the Supreme Court of the United States a few weeks ago, a change in the rates allowed by public authority would immediately result in a change of value; you would agree to that, wouldn't you, if we were to fix this value by the earnings at any particular time?

A. Yes,—for a short period you mean?

Q. Yes.

A. A period of a month or a short time?

Q. Yes.

A. Yes.

Q. Therefore, in your judgment, Mr. Taylor, all of the evidence presented by Mr. Morgan for the purpose of showing the assessed valuation of surrounding property and the valuations

placed by you upon this terminal property, as compared with the valuations upon surrounding property, amount to nothing of themselves?

A. I understand you to say that my impression is that neither Mr. Morgan's valuations nor our valuations amount to anything?

Q. No, I didn't say that. I said your claim is that the evidence which has been introduced by Mr Morgan for the purpose of showing the relation existing between the valuations placed by him upon the railroad property and the valuation of surrounding property immediately contiguous amounts to nothing, because that is not the proper basis upon which to value railroad property.

A. That is about how I should look at it.

Q. I don't understand you said that offensively, and I am not trying to ask you the question offensively.

A. I understand.

Q. I want to get at your idea. And your theory—

A. My idea of Mr. Morgan, he has been a most conscientious, hard-working student of a problem, but I think his premises are wrong, and I think he has built up a fabric which has no foundation.

Q. And your theory and your claim upon this point is very interesting, and you are much nearer the solution of it possibly than any of us realize. You absolutely reject the idea that railroad right-of-way is to be valued upon the same basis as contiguous property?

A. I reject it wholly.

Q. Reject it wholly?

A. I have ever since I have made any study of the situation.

Q. And you almost cease to regard it as real estate at all, in the ordinary sense?

A. Well, that is about true. It becomes a unique and unusual thing that is not subject to the same conditions of ordinary land.

Q. It is a right-of-way—

A. Yes.

Q. And the privilege which the Street Car Company has of laying its tracks upon Wabasha street is just as valuable as the hundred-foot right-of-way which the Great Northern has for the purpose of laying its tracks between here and Minneapolis; isn't that true?

A. Well, that is a phase that I am not competent to discuss.

Q. Well, isn't that where you inevitably come? in looking at it as I have said, it is the right of using the property for the purpose of conducting a railroad business that takes it out of the ordinary realm of real estate and makes all of these comparisons with surrounding property of no value?

A. No that is not what gives it its uniqueness entirely. That is one element. The strongest element—well, you can take the illustration that I gave you here in the Northern Pacific Rate Case of a stick of timber—I can't make it any plainer than I did on that—that this particular thing when once acquired in a city, a large piece of property in a restricted district, acquires a peculiar value of its own—

Q. Is there any difference? Now, have you followed that theory of yours out, Mr. Taylor, that real estate devoted to railway purposes and occupied as a right-of-way is to be considered entirely with reference to that business and without reference to the surrounding property?

A. Real estate possesses—

Q. I wish you would convince me that you could do that and that that is the true theory, because I think that ought to be the rule; I think that once the railroad company purchases the property and devotes it to that use, that ought to be fixed as the value of it, and that it ought to be considered as exempt from the ordinary rules, but I am afraid your counsel would not agree with you. Now, if your theory is right in that, the real estate out here at Hamline is worth just as much as the real

estate down at the union depot, because the rails are worth just as much, the cars are worth just as much, the conductors get paid just as much for traveling a mile, the rates are just as much; and if it is simply an operating tool, that property is worth just as much.

A. Oh, no.

Q. If the rails and the ties are worth the same the real estate would be. Now, don't you see that you do come back to the surrounding property, and that you come back to the surrounding property when you take up this piece of property on Seventh street sold to the Soo road, and that you come back to the surrounding property when you value the union depot property at more than you do the Hamline property, and that no matter how you may think about the matter, you finally come back again and compare it for its situation, its location with surrounding property?

A. Mr. O'Brien, that is exactly why we divided this thing up into sections. One particular section of property, owing to its restricted area and the impossibility of securing a similar piece, has a value all its own. The minute you carry that same line, spread out to a place where you can duplicate it, where you can parallel it without special expense, where the conditions admit of almost no limitation, then you have got something that is entitled to nowhere near the highest value.

Q. Well, now, in other cases, where this question of the restricted amount does not apply, is it your view that the surrounding property would have some influence?

A. Yes, it has some influence. I have never denied that.

Q. Unless you give your testimony with reference to the value of surrounding property, you must determine the value of this right-of-way solely with reference to its use as a railroad or for railroad purposes?

A. As I have reiterated a number of times there are a number of elements that enter into it to make the general value.

Q. The element of its relation to surrounding property does not enter into it, you say?

A. No, I never have said it didn't enter into it at all. It is not one of the main factors.

Q. You were asked what relation existed between outside and railroad property, and my recollection of your answer was that you said none; you were asked whether the sale price of surrounding property was an influence and you said no; you were asked whether the assessment on surrounding property was an influence, and you said no. Now, I understand that that is what you say still.

A. Well, the only question there, Mr. O'Brien, as I recall, is not a fair statement of it, the question of assessment and sales I will stand by, but will you ask the clerk to give the question as Mr. How put it, that I made a negative answer on the question of outside surrounding values being an element.

Q. Why, certainly, if I haven't got it right, I will be very glad.

Mr. How: My recollection is that I confined my questions to contiguous property that was not available for railway uses, and I gave as illustrations the property up on top of Dayton's Bluff, etc., property which is not available for railway uses; that you cannot compare prices paid for such property in the market with prices which he thinks he would have to pay for property available for railway uses. That is the idea I had in mind.

Q. How did you understand the matter, Mr. Taylor, as Mr. How states it, or in a broader sense? that in arriving at the value of a right-of-way there could be no relation established between the value of contiguous property and the value of the right-of-way?

A. The various questions that you put to me of whether I would be affected by the assessed valuation, I would say that I would not; whether I would be affected in making an appraisal

of a railroad right-of-way by certain sales of individual lots that had taken place in the vicinity, I would say that I would not. Now,—

Q. No matter what the situation was?

A. No matter what the situation was; that that would be such a slight element as not to deserve consideration in the general formation of an opinion on a right-of-way; but as far as the value of property of exactly the same kind, in a general way, through a district, that would be deserving of a certain amount of consideration.

Q. But you would insist upon the property being exactly the same kind. Now, let us imagine that we have a tract of land of 160 acres in area, and a railroad right-of-way is established across that tract of land; before and after the establishment of the right-of-way, the land, for general purposes for which it was adapted, other than railroad purposes, had a value of $50 per acre, and that value remained on the land outside of the right-of-way after the construction of the railroad; would you consider that that would establish the land value of the right-of-way?

A. It would have a bearing to this extent: if it was a question of acquiring a right-of-way through—

Q. No, it isn't a question of acquiring. Now, just the value.

A. Well, the value, where it made no difference whether that right-of-way went here or there, or there, being separated, each piece, by a hundred or two hundred feet, all being exactly similar, and removed from the various elements of commercial centers—which is one of the things which gives value to railroad property—isolated, out in the country, away from any city, then your right-of-way would not vary particularly from the value of the adjacent land.

Q. Then, in that instance (in the agricultural community) the use and occupation of that strip of land for railway purposes would not enhance its value materially?

A. No, because you have the possibility of a redoubled use anywhere along through the district, except that possibly from one point to another you are desirous to have the railroad as straight as possible, there would be more value to the line going from a fixed point to another fixed point than if you had to carry it a half a mile or a mile farther east or west, or north or south to meet the point, because you would stretch it out to that extent, and therefore the shorter line would have more value than the other, although the nature of the ground and the surroundings and everything were exactly similar.

Q. Now, I think that could have been answered by yes or no. I simply wanted to get your idea if the occupation of that for a railroad right-of-way would have enhanced the value of that strip of land materially. You don't think it would, as I understand it?

A. Except always for this one feature, that if you went across a section of land which was owned by a man who knew that it was necessary to go across there for a railroad, the fact of its being sought for by a railroad for railroad purposes would put a much higher value on it than for agricultural purposes.

Q. Well, do you mean that it would put a higher value upon it, or that it would increase the cost?

A. It would increase the cost to the railroad.

Q. Well, would that element be taken into consideration by you in establishing a market value?

A. After you have got a right-of-way completed, the number of ownerships of various pieces of property through which you have been obliged to buy your railroad right-of-way, all tends to increase its value over dealing with one man, in the general run of cases.

Q. What percent did you, in your judgment, add to the value of the terminals of the railroads in this city over and above the normal value of the land because of the fact that that land was used for railroad purposes?

A. Made no attempt to apply any such theory to it, Mr. O'Brien.

Q. Can you separate in your valuation the amount which you would consider the land worth for ordinary uses and the value which you have placed upon it because it is occupied for railways?

A. Yes, in an arbitrary way. There is no absolute line of demarkation.

Q No.

A. But, you take the property going up Trout Brook or Phalen Creek gorges, it has almost no value from a residence point of view—down in a gully, subject under normal conditions to overflow, deprived of proper ventilation, and almost wholly unfit for ordinary purposes of dwellings; and yet, offering a unique and ideal situation for a railroad, escaping grade crossings, coming into the city on the level of the river, and having any number of very unusual and valuable features from a railroad point of view; but for all ordinary real estate purposes, having next to no value.

Q. The result of that is, that the gorge being available for railway purposes, that land becomes normal, does it not?

A. Becomes normal?

Q. Yes. If there were going to be no railroads, the fact that it was in the gully, the fact that it is barren, as well as the fact that there is no proper ventilation, would practically deprive it of any value, wouldn't it?

A. It would to a very large extent.

Q. Yes, but because it can be used for a railroad purpose, it becomes normal land, does it not?

A. No, it becomes abnormal, because it jumps right over the ordinary use to be capable of that very highest, or one of the highest, uses to which lands can be put.

Q. You think it is better, you think the barrenness of the soil and the lack of ventilation, and the curving of the gorge

makes it better for railroad purposes?

A. Not the curving of the gorge, but the general topographical situation; the fact of its being below the grade renders it of just the value that it would cost to cut that out.

Q. Yes, that is right.

A. Above what it would be if it was on a level.

Q. Yes, it may be worth the additional amount that it would cost to cut that out?

A. Yes.

Q. Now, if you were to take the value of the property on each side and add to that the cost of cutting it out (cutting out this gorge) you would get about one-fourth of the value that you have placed upon it, wouldn't you?

A. Well, I have no means of judging that; it would take some calculation.

Q. You could get as bad ventilation and as bad soil in the same way. Now, Mr. Taylor, assuming that you are incorrect in saying that property devoted to railway purposes from that use ceased to have the characteristics of ordinary real estate, and ceased to respond to the fluctuations of the real estate market; assuming that you had to value this on the same basis and in the same way that you would attempt to value any other real estate (purely as real estate) then, you would have to take into consideration the value of contiguous property, wouldn't you?

A. If we segregate it into its original platted lots, and isolated pieces.

Q. I am not talking about segregating it at all, but I am talking of treating it as land, of land the same as any other land.

A. If you treat it as land, Mr. O'Brien, and have the accumulation complete, then you have got your railroad right-of-way. If it isn't the Great Northern, it can be the Illinois Central, or whatever railroad may wish to make use of it.

Recess until 2 o'clock P. M.

AFTERNOON SESSION.

Q. Mr. Taylor, when we adjourned, we were speaking, I think, of the proper method of valuing a railway right-of-way, and we had agreed that the real estate constituting the right-of-way of a railroad was different from all other real estate so far as its relation to contiguous property was concerned; is that true?

A. Yes.

Q. So that in valuing terminal properties of the railroads in this city, yourself and your associates proceeded upon that basis?

A. To a large extent, yes.

Q. Well, if that was the basis upon which you proceeded, that was the entire basis, was it not?

A. Well, that it was different from adjacent property, yes.

Q. And was unique?

A. Yes.

Q. And that you must consider the present use of the property, its availability for that use, and, in other words, consider it as a part of the railroad machine?

A. Well, that is hardly a fair way to put it, I think, Mr. O'Brien; that is, when you consider that we were asked to make an appraisal on the land itself we could not then consider it as one of the component parts of the railroad.

Q. But you say you did. You didn't regard it as land which might be used for gardening purposes or for residence purposes?

A. No, for a railroad.

Q. You regarded it as property available for and actually used for railroad purposes, did you not?

A. Well, we were expected, and tried as far as possible, to eliminate from our calculations the existing improvements.

Q. Certainly; you didn't consider the grade, nor you didn't consider the rails?

A. No, but if you choose to consider it a part of the railroad, we were to pass an opinion on that particular part of the railroad of which this—that particular part of the railroad was comprised of this land.

Q. Now, you said you endeavored to make a fair and equitable valuation of that property?

A. That was our attempt.

Q. You added to it no value or element which you could not see in your judgment existing?

A. One of the main criterions of value, to which I referred before, was an estimate as nearly as we could form an opinion on the possible cost of reproduction, taking into consideration all the difficulties encountered in acquiring a long contiguous strip of property.

Q. Well, was that the test that you applied for the purpose of coming to a conclusion as to what your valuation was?

A. There is no definite positive test, or no absolute criterion of value that can be applied, Mr. O'Brien; it is all somewhat elastic.

Q. Well, did you apply that test?

A. As far as we were able to in our opinion; it was all a matter of opinion, based on experience.

Q. Then that was one of the tests which you applied—the cost of reproduction?

A. Yes, that was always, in my mind, one of the main elements in determining the value of railroad terminal property.

Q. Now, just as you included no element which did not actually exist, you left out no element which you thought added to the actual value of the property, did you?

A. No, we did not intentionally leave out anything that added to the value of the property; we wanted to be fair.

Q. You considered every element which could enter into the actual value of that property?

A. That was our intention.

Q. So that your conclusions represented, as nearly as you could, the actual, honest and complete value of all that property as it existed at that time?

A. That is what we attempted to reach.

Q. And so far as your judgment is concerned, there would be no justification in adding to that value 25 per cent, or 50 per cent, or 75 per cent, would there, if one was endeavoring to find the true value of the property?

A. I don't quite see the application of that. We endeavored to—

Q. Well, it is rather a simple proposition, isn't it? if it is your judgment of the value of the property, its actual value, considering its location, its availability, its use and the purposes for which it was used, if the true value of that property was the amount given by you, any addition to that would not be the true value of the property?

A. That was, in our opinion, the value of the property when we made that appraisal.

Q. Doesn't that necessarily follow as a logical conclusion?

A. Why, yes, it seems to me so.

Q. Yes, certainly. And you arrived at that true value in the methods which you have described?

A. Yes, the various elements entering into it.

Q. Now, Mr. Taylor, supposing you were asked to value that land simply as land, to ignore its present use, to value it as land upon which buildings might be erected, upon which gardens might be established, which might be crossed by railroads, or used as ordinary land is used and that you should eliminate the question of its peculiar value to any particular railroad and value it simply as land; in that case the value of contiguous property would be very important, would it not?

A. Well, you put rather a peculiar situation. If there was no railroad iron, no railroad track laid on this particular tract of ground, and I was asked to value that tract of ground as a

tract of ground, the first thing that would present itself would be its possibilities for railroad purposes; that would be the highest use you could put it to; then there would be various other uses you could make of that down there; some of it could be used for one thing and some for another, but the first thing that would suggest itself would be its possibilities for railroad uses, and therefore it would be entitled to a high valuation. Then you could take certain portions of it and sift it down into various other uses, some portions being capable of half a dozen different uses.

Q. Well, a great deal of the contiguous property is just as available for railroad purposes as this property?

A. On some portions of this line, and others not.

Q. Yes, that is true, but in every case you have valued the property at a larger sum that you did the continguous property or than you have placed the value of contiguous property. Now, let us take the case of the Rock Island, which acquired the right-of-way on the West Side. You are aware that that right-of-way has been acquired in the last few years for about one-third of the amount which you valued it at in your report, are you not?

A. Yes.

Q. Now, your claim is (and I am not quarreling with your claim at all), that that property, having become railroad property, that strip of land across on the West Side, being used for railroad property, it must be considered as railroad property, and therefore as having a higher value than it had before it became railroad property; isn't that true?

A. Well, I would be glad to give you an explanation of that valuation.

Q. Well, can you answer that question? isn't that true?

A. Please state the question again, because it isn't clear.

Q. You claim that that strip of land purchased by the Rock Island Road, by reason of that purchase and by reason of the construction of the road, it became railroad right-of-way, it at

once separated it and distinguished it from the property on each side of it and made it more valuable?

A. Yes, sir.

Q. So that you felt justified in saying that while that property could have been purchased under cover for one-third of the amount that you valued it at, it now having become railroad property, it was worth the sum which you fixed?

A. It was worth more at the time they bought it than they paid for it.

Q. Well, still isn't that true what I have said, that having become railroad property its value was increased?

A. Having become a large tract of contiguous property?

Q. Yes.

A. It became more valuable than individual lots in the vicnity.

Q. Having become part of a right-of-way?

A. Of a piece of right-of-way.

Q. Well, now, what I want you to do is to answer the question that I asked you.

A. I mean to as far as I can.

Q. I know that, Mr. Taylor. It is simply a question of our understanding each other. If you were endeavoring to ascertain the value of these different tracts of land, considering them merely as so many parcels of real estate upon which houses might be built, gardens established railroad tracks laid, you then would consider the contiguous property, would you not?

A. To a certain extent, yes.

Q. Now, of course the price for which property sells, day in and day out, establishes the market value of property, does it not?

A. For ordinary purposes.

Q. Yes. We have had that experience in St. Paul, and following the hard times between 1890 and 1900 a large amount of property which had been acquired by mortgagees under foreclos-

ure sale was thrown upon the market, and while that property was there and sold cheaply it kept down the market price of property generally, didn't it?

A. Yes, to a very large extent. No buyers, and all sellers.

Q. If you and I command contiguous property of the same character, so long as I am willing to take 50 cents a foot for my property, you can't sell yours for a dollar a foot, can you?

A. No.

Q. So that in the last analysis the going prices for property establish its market value ?

A. Of ordinary property.

Q. Of ordinary property, yes. Now, isn't it true that property in the city of St. Paul has been assessed for the purposes of taxation at an average of about 60 per cent of its selling price?

A. Throughout the entire city I should say the average was higher than that, but in certain districts assessed for as much, and in many instances much more than it would sell for.

Q. That is true.

A. If you take the entire city limits, I should say that the average selling price during the past five years of anything within the corporate limits of St. Paul would be in excess of,—that is, the assessed valuation would be more than 60 per cent of what it would sell for.

Q. Have you investigated that for the purpose of ascertaining?

A. I have not.

Q. If you were told that independent investigations, extending over many thousands of sales and millions of dollars worth of property, scattered throughout the city from one end to the other, had shown that property had been assessed at about 60 per cent of the selling price, you would not be able to contradict that statement, would you?

A. No, I have no data at my command; it is only the experience in my own business, which has been continuous, and many instances—

Q. Now, that ratio has been the average ratio, has it not?

A. Well, I don't know about that ratio.

Q. Well, you have been discussing the propriety of Mr. Morgan's method here—

A. Yes.

Q. —now, of course, if you don't know anything about his method, and don't know whether the facts he has stated are true or not, you should not discuss it under oath and give your opinion against it, because you can't have any.

(No answer.)

Q. Now, do you know what his basis is, or don't you?

A. I am fairly familiar with his basis.

Q. Very well, then; do you know it to be the fact that that was the average ratio?

A. Of the entire city?

Q. Yes.

A. I stated a minute ago that I did not know.

Q. You don't know that, but you know that whatever figure he did claim he claimed as the average, don't you?

A. I know he had some basis of that sort.

Q. You know that nobody assumed that there was a uniform relation between the selling price and the assessed value, don't you?

A. No, my claim is that the variation is so great that you cannot, in any one particular district, apply it with any degree of accuracy.

Q. Now, do you know whether anybody has claimed that to be true?

A. Well, that is the theory upon which Mr. Morgan has attempted to demonstrate his opinion of the railroad valuations here.

Q. Well, now, do you know that to be the fact?

A. Judging from what I have heard from Mr. Morgan.

Q. Were you present at his testimony when he testified at the Capitol?

A. At the Capitol?

Q. Yes.

A. No.

Q. Well, now, supposing you ascertained as a fact that Mr. Morgan in his testimony, had himself demonstrated and pointed out that in one portion of the right-of-way in the city the ratio between the assessed valuation and the sales price was 9 to 100, and that in another portion of the right-of-way in the city, the assessed valuation was some 250 to 100 for selling price, you would have to conclude that you were mistaken in your estimations as to Mr. Morgan's theory, would you not?

A. No, I have applied Mr. Morgan's theory and seen it applied in specific instances to a sufficient extent to satisfy myself that the theory was untenable.

Q. Did you apply Mr. Morgan's theory as Mr. Morgan applied it to the thousands of acres of property occupied by railroads in the city of St. Paul?

A. I have never attempted to even break down Mr. Morgan's theory.

Q. No, but did you do that?

A. No, I never—

Q. Did you check the claim made by Mr. Morgan by first finding out that he took the actual ratio as established in the different districts and then took sixty to one hundred as the ratio for all of it to find out whether they agreed or not, and came within 2½ per cent of agreeing?

A. Not on the general proposition.

Q. You didn't make that test of it?

A. No, I made no attempt to generalize throughout the city on it.

Q. Then, as a matter of fact, Mr. Taylor, isn't this the truth: if the ratio throughout the entire city of St. Paul has been 60 to 100 we should not apply that ratio for the purpose of ascertaining the value of any particular piece of property unless

we take a base sufficiently large to maintain the average; isn't that true?

A. Well, that is a rather intricate proposition.

Q. The ratio is a fact, isn't it, because we have got the sales and we have got the assessments?

A. Well, you state it for a fact. I am not prepared to deny it.

Q. Now, when Mr. Morgan is valuing thousands of acres of land in the city, the Northern Pacific alone having 600 acres of land, and you attempt to ascertain whether his price is large enough, by taking into consideration eight or ten lots, you are not making any test of his theory at all, are you?

A. No, but you are applying that theory to restricted locations and basing a theory on a general situation between each and the railroad; there is scarcely any comparison. You are building up a broad foundation, and then—

Q. Can you describe any class of property in the city of St. Paul which is not at some point traversed by a railroad right-of way? Now, just let us commence that. Coming from Hastings they run over the swampy ground at the foot of the bluff; the same way going out towards Mendota. The Great Northern road runs out and then crosses over through Hamline out to the property between St. Paul and Minneapolis; the St. Paul & Duluth road (now the Northern Pacific) goes out through the First Ward, out through Arlington Hills; the Milwaukee road comes up through the Fifth Ward, and crosses Summit avenue—not at the place where it is most valuable, of course; and then we have the Union Depot and the great yards, set right down at the river front, in the center of the city; so you can't imagine a class of property, with the possible exception of Summit avenue from the top of the hill to Dale street right through there—bluff property, swampy property, residence property, manufacturing property, or any other kind of property—which is not traversed by one or the other of the railroads in this city; and

if you take into consideration enough of that property to make your base large enough, you must come to the same average that there is in the entire property that there is in the city, musn't you?

Mr. HOW: That is really all argument.

Mr. O'BRIEN: Expert testimony generally is argumentative.

A. I don't know that you would, because notwithstanding that you attempt to generalize in this way on the whole thing, the minute you cut the city up into districts, you find a wonderful disproportion; you can take it from the Eighth Ward, for instance, and that theory, as advanced by Mr. Polleys, and carried out to a greater extent by Mr. Morgan, will apply quite closely, because the property has been of such a similar character that the sales varied only to a slight extent.

Q. But you did not attempt to ascertain the value of this property as ordinary land available for ordinary purposes at all?

A. No, I didn't consider that—

Q. Didn't consider that a proper way of arriving at the value?

A. —as a proper way to arrive at that value.

Q. You considered the property in the light of its actual use; that is, you took a practical view of the subject and considered it in the light of its actual use, didn't you?

A. I considered it as to its possibilities for railroad use.

Q. Yes, you considered it as land actually used by railroads, didn't you?

A. Well, it is hard to actually separate that thing in your mind.

Q. It is impossible, I think, Mr. Taylor.

A. Yes.

Q. It is impossible to me to see what difference there is in considering property actually used for railroads and property from which railroads are about to be removed and which will be used for railroads.

A. I don't see any—

Q. So you did consider it as property that was actually used for railroads?

A. Well, in a practical point of view I suppose that is what it amounts to; in a theoretical point of view we were taking the land.

Q. And you gave to it, as such, every element of value which you considered it could have, as you have already described?

A. And as a piece of property for railroad possibilities.

Q. As a piece of property for railroad purposes?

A. Yes, sir.

Q. What it would cost to reproduce it?

A. Yes.

Q. What its value was to the railroads themselves how much of that property was available and its adaptability to that purpose, and any other element that could give it value you added?

A. Well, we tried to give it a fair valuation.

Q. You tried to give it every value that it could have?

A. Yes.

Q. You were trying to arrive at the true value?

A. Yes, naturally.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. There has to my mind been rather indiscriminate use of the word "value" and without, perhaps, bearing in mind what value really is; now, what in your opinion does value of real estate depend upon, Mr. Taylor, that is, real estate is dirt, fundamentally. Does all dirt, wherever situated and to whatever uses it may be put, have the same value, and if not, why not? What does the value of real estate depend upon?

A. Well, it depends upon the multifarious uses to which it can be put.

Q. That is exactly what I supposed you thought. Now, land

in Anoka county which can be used, so far as anybody is as yet advised only for farming purposes (I take Anoka county merely for illustration) is not so valuable as land in the center of the wholesale district of the city of St. Paul; that is true, is it?

A. I think it is.

Q. And the reason of that is that it is not capable, so far as anybody is as yet advised, of so high and remunerative a use as the property in St. Paul; that is correct?

A. That is true.

Q. Property in the environs of the city of St. Paul, outside of the most thickly populated part of the city, can perhaps be used for residence purposes; that, I take it, from your experience is not so high a use, so far as value is concerned, as property which can be used and is available for retail-store purposes; am I correct in that?

A. Yes, it scales right up.

Q. What do you consider the position of railway use is in the scale of uses making value? Is it high or low?

A. It is among the highest uses to which property can be put.

Q. And what influence upon that proposition has the topography of the city of St. Paul, which, as you have testified, makes property available for terminal purposes here restricted in area?

A. Well, the topography of St. Paul has a very marked effect on the value of the so-called terminal properties, particularly those located in the wholesale district down in the vicinity of the union depot.

Q. And is that effect to make the value higher or lower?

A. Higher; owing to the limit of the amount of property available for railroad purposes.

Q. Now, "value" of property as it is used and has been used in your testimony and in the testimony of all the witnesses in this case, means the sum which it ought to bring under proper circumstances in the market, does it not?

A. Yes.

Q. That is, when talking about value you are not talking about a value based upon an income return, but upon the price which it ought to bring in the market; am I right about that?

A. Yes, as applied to the generality.

Q. Now, property which is not in use for railway purposes, but which may be contiguous or may be in the neighborhood of railway property, and which, so far as we yet know, has a use only for residence or a grocery store or some such purposes, has no railway value and no value added on account of a capacity for railway use; am I right about that?

A. In the majority of instances.

Q. As soon as property is sought by a railway comapny, it becomes available for railway uses and has an added value on account of its availability for railway uses; that, I take it, is the purport of your testimony?

A. Yes, there is no question about that.

Q. Now, let me understand this: Do you consider that property which becomes necessary for a railway use because lying in the line which the railway company must pursue in acquiring its right-of-way, is of any more value, or any less value, in the meaning of the term as you have employed it in your testimony, before it is actually acquired by the railway than it is immediately after it is acquired by the railway; that is, have you fixed your valuation upon the price that it ought to bring when purchased by the railway for the purpose of its right-of-way, or have you fixed it upon the value to the Company as an income-earning property after it is acquired?

A. Well, the attempt of this appraisal, Mr. How, so far as possible, was to base our valuations on what would be considered a fair value for those properties having all been accumulated into one whole.

Q. Yes; that I am not talking about; I understand that you have added to each piece the value that pertains to it through its being a part of the entire tract; that is, the entire tract is

more valuable than the aggregate of each small tract taken separately; but what I am trying to elicit is this: you assumed that this property lay in different owners, did you not, in different tracts, as property generally lies when you get your valuation; or did you value it as one entire tract?

A. We valued it as one entire tract, but recognizing that if you were attempting to duplicate it the property would then lie in different ownerships, and you would have all the added expense and tribulation of acquiring the property from these different owners, which is one of the elements of value in acquiring right-of-way.

Q. Well, I think I asked you if you thought you could buy this property for the valuation that you put upon it if it were in separate owners from beginning to end and in separate owners of small tracts, all of it.

A. I do not think that it could be bought for the price that we—

Q. Then your opinion is that the valuation that you have put upon the property is less than the present cost of acquisition of the property if it were vacant and in different owners and it was sought to be procured for railway purposes?

A. I think that is correct.

Q. Well, if that is correct, then you certainly cannot have added any value to the property on account of its ownership by the railway company; that is, if your valuation is less than it could be purchased for if it were in separate owners from beginning to end. Now, with regard to the Rock Island purchase: It has been stated, and perhaps is true, that the values placed upon the Rock Island property was three times what it cost the company to acquire it; do you happen to know anything about the circumstances of that acquisition by the company of this property in West St. Paul?

A. Yes, I am somewhat familiar with it.

Q. What were they, as far as they affected the price which

the company had to pay for the property?

A. The acquisition of that property by the Rock Island took place at a very opportune time, as far as the railroad was concerned. It so happened that West St. Paul, through which they pass, had for several years been in a very depressed condition; no other portion of the city had suffered from the over-effects of "boom" to the extent that West St. Paul had. There were a lot of non-resident owners who were only familiar with the fact that extreme depression prevailed and that the property was not salable at any price; in addition to that, quite a large portion of the land to be acquired by the Rock Island was in bankrupt estates; a very large tract was in the hands of the receiver of the Bank of Minnesota; there were two other bankrupt estates, all of which were being pushed to realize what money could possibly be made available, at as great an extent as possible. This particular tract of land that was owned by the receiver of the Bank of Minnesota had formerly been owned by Mr. Uri Lamprey. Had the Rock Island attempted three or four years earlier to have acquired that right-of-way, it is my opinion that they never would have got Mr. Lamprey's piece for the entire cost of their right-of-way over there. The same thing would have applied had they made their purchase two years later than they did, for the property changed hands and went into the hands of people who appreciated its possibilities, who were in no hurry to sell, and would never have listened for one moment to the price that was offered and accepted by the receiver of the Bank of Minnesota. Mr. Lightner was being pushed by the creditors as hard as possible; he exercised the best of judgment all through his sales, but here was a chance to liquidate a certain portion of the liabilities and he took the price that was offered. The consequence was that that entire tract, from the joining of the Great Western up to the terminals themselves, at least four-fifths of it, was acquired from people under almost duress, obliged to cash up at any sort of price; therefore, in making up

our figures for that railroad we put that on the same proportion that we did the Great Western and the Omaha, wherever there was parallelism existing, and entirely disregarded the purchase price because we didn't consider it was an element in a fair estimation of the value of the property in comparison with the other railroad properties in St. Paul.

Q. Do you know whether it was notorious at that time that the Rock Island procured that property cheap? Notorious among real estate men I mean.

A. With those who were at all familiar with the situation.

Q. It was?

A. Yes; recognized as having been acquired very cheap, so cheap that Mr. Morgan, when he came to appraise the property, appraised it for very much more than they paid for it.

RE-CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. Mr. Taylor, as I understand your testimony, in valuing the right-of-way and terminals of the Great Northern road you took into consideration the fact that the real estate constituing the right-of-way and terminals was actually used for railway purposes?

A. As I explained to you a few minutes ago, Mr. O'Brien, that was one of those subtle things that is hard to separate.

Q. But at least that it would be used for railroad purposes?

A. Yes, that is a fair way of putting it.

Q. You would rather put it that way, that it would be used for railway purposes and that it was best available for that purpose?

A. Yes.

Q. That it constituted one entire tract?

A. Yes.

Q. That the acquisition of that tract, the arrangement of that tract and the establishment of that entire tract of itself was expensive?

A. Yes, the gathering of it together.

Q. And that therefore in its entirety, considering that it would be used for railroad purposes and considering its entire availability for railroad purposes, you came to the conclusion that it had a peculiar value as railroad property?

A. Yes.

Q. And you gave to it the full amount of that value upon the theory that the railroad company would become compelled to go out and purchase it if it didn't have it in its present form?

A. Yes.

Q. In other words, to reproduce it?

A. Yes.

Q. Now, having given it the value as an entire tract as I have described, already acquired, and available for that purpose, would you have been justified in adding to that value a sum upon the theory that the property was segregated into separate tracts held by private owners, some of whom had improved it by the erection of buildings upon it which would be useless when it was acquired for railroad purposes, that the company would be compelled to again go through the work of acquiring it from the different and various owners?

Mr. How: That is objected to as argumentative, and that is a question of law for the Court. The witness is asked now whether the Master is going to be justified in adding a value to it from the supposition that buildings may be upon it, a supposition that damages to the owner may have to be paid and so on; I think that is a wholly improper question, a wholly improper examination. I think a good deal of it has been, but I think now I ought to protest. I say in this case, as I said in the case of a former witness, that it cannot be of any assistance to the Master and certainly counsel for the Complainants will not abandon their contention whatever Mr. Taylor's views may be in regard to what the law ought to permit or require, and it cannot be any proper encouragement to counsel for the other side if Mr. Taylor

shall agree with them upon the law, but it is purely a question of law.

The MASTER: I think that it may have some bearing upon the attitude of the witness and upon his testimony generally and that it is fair for him to answer it if he can.

Mr. HOW: If the Master will bear in mind that he is not being asked whether he did that but whether he thinks he would be justified or somebody else justified in doing it.

The MASTER: Well, it may have something to do with the mind of the witness, his attitude towards the matter.

A. Now, state that question again, Mr. O'Brien.

The last question was read and added to as follows: "You having already increased the value of the property because of many of the matters which I have mentioned in my question."

A. I can't say whether we would have been justified or not in such a course. We didn't adopt such a course, therefore it is a hypothetical question. I don't see how I can answer it.

Q. What I mean is, would you have been justified, after you had arrived at your judgment as to the value of this property, to have gone on and added another value to the value you had arrived at because the property might be separated into different tracts and improved in various ways?

A. Well, we didn't do so. and I don't know whether we would have been justified or not; the question was not up for discussion. I couldn't answer it without giving it more consideration.

Q. Now, didn't you consider all of that matter when you said that the property was of a certain value because it was in one continuous tract, having been brought together?

A. Why, one must have realized that such a tract never could have been gotten together without having gone through certain of those phases.

Q. Yes, and you considered all that in giving this high value which you gave to the property?

A. Well, we considered that that was a value that would

meagerly represent a duplication of that property, that it was a very conservative value of the property as it stood at the time we made that appraisal.

Q. So that, if you had again started in and added a value to that property for any of those conditions, you would have been duplicating the elements which you took into consideration?

A. Well, I can scarcely see how I can be expected to answer questions that were not an element in our valuation, Mr. O'Brien.

Q. All, right; now answer me this: Let me assume that the valuation of the Great Northern right-of-way and terminals as you gave it in the city of St. Paul was $10,000,000—

A. Yes.

Q. That is not the right figure, but we will assume that.

A. Yes, all right.

Q. Now, I say, "Mr. Taylor, I am going to add twenty-five per cent to that because it would cost me a good deal of money to go out in the market and acquire that property," if I were representing the railroad company; your answer is that you have considered that, isn't it?

A. No, I could scarcely say that, because, as I have reiterated over and again, we tried to make that conservative, I for myself, constantly having before my mind the fact that they could not go along and duplicate certain half miles or miles of stretches, in my opinion, at that price; I put the price under one that my judgment would dictate it would cost to duplicate it.

Q. Well, then, I would say, "I am going to add a certain per cent to that because if I had to go out and purchase that property for the railroad company I would find it in separate tracts, settled up and owned by different people"; your reply would be "We have given you the greater value than it would be in that shape because we have considered it as an entirety, and you can't add an additional amount to our figure when we have already given it the increased value because of its situation"?

A. Well, all those elements were a part of our valuation.

Q. All those elements were a part of your valuation?

A. Yes.

Q. So that if I attempt to add a percentage for this or that, considering it was to be a property acquired for railroad purposes, I am duplicating the elements which were in your mind, am I not?

A. To a certain extent you would.

Q. Now, of course, when you speak about the property being more valuable in the wholesale district, you are considering adjacent property, aren't you?

A. Yes, the adjacent property.

Q. And to a certain extent you have to?

A. Yes.

Q. It may not be the controlling thing, but to some extent you have to?

A. I have never denied it.

Q. No, I don't know as you have. It would be impossible for you to say whether the railroads had given the value to the wholesale property or the wholesale property had given the value to the railroad property, wouldn't it—you can't tell that?

A. No; I think there has been a mutual effect.

Q. Mutual effect; it has all gone on together?

A. Yes.

Q. And when you come to the point of one eliminated and the other existing, you are getting into a range of speculation which a hard-headed real estate man like yourself doesn't indulge in, isn't that so?

A. True, yes.

An adjournment was here taken until Saturday morning, March 27, 1909, at 10 o'clock.

Federal Building, St. Paul, Minn., Saturday, March 27, 1909, the hearing was resumed at 10 o'clock A. M.

JOHN F. STEVENS,

sworn on behalf of complainants, testified:

By Mr. HOLDEN:

Q. Mr Stevens, what is your present occupation?

A. I am vice president of the New York, New Haven & Hartford Railroad, but in charge of operation, including transportation and mechanical work.

Q. How long have you been engaged in railroad work?

A. About thirty-four years.

Q. And what has been the general character of that work?

A. Civil engineering—almost wholly in the location, construction and maintenance of railway and to a certain extent in the operation of railways.

Q. Your work has been, during that period of time, concerned not only with the location of projected lines but also with the construction of new lines and the maintenance of lines after construction?

A. Yes, sir, maintenance and operation.

Q. Will you state or give the extent of your experience in the way of stating the different lines you have built and the companies that you have been with during that period?

A. Well, my memory is sometimes a little treacherous for dates, and I drew off a little memorandum this morning, if you will allow me I will refer to it.

Q. Certainly.

A. I began my work as civil engineer in 1874 in Minneapolis with the then city engineer of Minneapolis. Throughout that year of 1874 and the early spring of 1875 I was in the same business at the same locality. The rest of the year of 1875 I was making railroad surveys between Glenwood (by way of Hancock) and Appleton, Minnesota. In the late fall and winter

of 1875 and 1876 I was in private practice surveying and subdividing lands, with an office at Glencoe, Minnesota. Late in the winter of 1875-6 I went to Texas. I was there three years through 1876, 1877 and 1878, in charge, nearly all the time, of location of railways for different companies, and a part of the time on construction, the latter on what is now known as the Cotton Belt road. From there, at the end of about three years, I went to Colorado and New Mexico, in charge of location and construction for the Denver & Rio Grande Railway. I was there all of 1877 and until late in the winter of 1877-8; then I came with the Chicago, Milwaukee & St. Paul, in charge of the location of their main line between Council Bluffs and Cedar Rapids, Iowa. I remained with them about one year, when I went to the Canadian Pacific, where I remained four years in the construction of the main line from a point about 150 miles west of Winnipeg through to the coast. The first year, which would be 1882, I was contractors' engineer for Langdon & Shepard, who were general contractors for the construction at that time of five hundred miles of road across the plains. The three succeeding years I was with the company there (that is, the Canadian Pacific) in charge of the location and construction of heavy mountain work through the main range of the Rockies and in the Selkirks and in the Gold Range. I remained there until late in the fall of 1885, when the track was connected, then I came back to the United States. Went immediately with the Chicago, Milwaukee & St. Paul again, in charge of the construction of the line from Sioux City southeast to Manila, one of the lines that I had located four years previously. I remained with that work until it was practically completed, when I went to Marquette as principal assistant engineer in charge of the location and construction of the Duluth, South Shore & Atlantic, which we built at that time from Sault Ste. Marie through to a point about twenty-five miles west of Ashland, Wisconsin. That work took two years, as I recall it, 1887 and 1888. I was with

that road solely in charge of it from start to finish from surveys until it was completed and turned over to the parties who bought it ready for operation. In 1889 I was nearly all the season with the Spokane Falls & Northern Railway, now part of the Great Northern system, in charge of the surveys and made nearly all of the locations for that road—the final location.

Q. That was located where?

A. From Spokane north up into the Colville Valley, practically up to the British Columbia line; and part of the season I was on reconnaissance and exploration in the mountains for the same parties. In the winter of 1889-90 I was for some while on reconnaissance or exploration for the Great Northern Railway to find a practical pass across the Rocky mountains for their extension. In 1890 I went with them in charge of surveys and construction from Spokane, Washington, to Puget Sound, involving, of course, the development of the Cascade ranges. I was with them in that capacity during 1890, 1891 and 1892, being in charge of construction through the Cascade mountains. On the completeion of the road—that is, when the track was connected through—I was sent to Spokane and made assistant chief engineer of the Great Northern Railway, having jurisdiction over all lines from Minot, North Dakota, to the Sound, including all the coast lines. I remained there until early, I think it was in January, 1895, when I came to St. Paul and was made chief engineer of the entire system, having charge of all engineering, the direction of all maintenance, of all extensions and improvements over the whole system. Early in the season of 1898 I severed my connection with the Great Northern and associated myself with some contractors and we took a very large and important contract for building a piece of heavy mountain road for the Canadian Pacific. This road was called the Columbia & Western. It extended from the Columbia river westerly from the foot of Arrow Lakes across two mountain ranges into what was known as the Boundary Creek Mining District, near Grand

Forks, south British Columbia. I remained with this work, having largely charge of all the organization, distribution of forces and general development of the enterprise, for about ten months, when I returned to the Great Northern as chief engineer. That would be early in the season of 1899 (I think I have got these dates straight) and resumed the same duties that I had when I was connected with that road before. In addition to those duties, in I think 1902, I was made general manager as well as chief engineer, and as such I had charge not only of all the engineering, as before, but of all of the operation and transportation, mechanical and everything else. I continued in that work until late in the winter of 1903, when I severed my connection again with the road and went to the Chicago, Rock Island & Pacific Railway, as chief engineer, ostensibly; I took up the duties as chief engineer for a few months, until I was made fourth vice president, having in charge not only the engineering but the maintenance of way and a great many other special duties, and after a short time I was made second vice president, in charge of operation, transportation, mechanical work, maintenance of way, engineering and everything pertaining to the operation and construction and maintnance of the road, covering about 7,500 miles. I stayed with this work until early in the season of 1905, when I made an agreement with the United States government to go to the Philippine Islands to act as adviser to the Philippine government in the location, construction and operation of a large amount of railway that they were proposing to build. Before the date of sailing, I accepted the position of chief engineer of the Panama Canal—of course, for the United States government—and I occupied that position as chief engineer, then also as Isthmian Canal Commissioner, then as Chairman of the Isthmian Canal Commission as well as chief engineer and Acting Governor of the canal zone for about two years, until April 1, 1907. Then I came back to the United States and began some special work for the New York, New

Haven & Hartford Railway in New England. I began this work in the latter part of April, and on the 1st of August of the same year I was made vice president in charge of operation of the New Haven lines, which position I still occupy.

Q. Recurring to your connection with the Great Northern road, will you state, as far as you can recall, the lines in Minnesota that were constructed new under your direction?

A. The line from Coon Creek to Brook Park; the double track from Brook Park to Hinckley; the short extension from Spring Park, Lake Minnetonka, to St. Bonifacius; the through line from Boylston, near West Superior, to Cloquet, and the double track of the old line from Cloquet to Brookston; from Deer River through to Fosston; and also an eight-or ten-mile change of line between Fosston and Crookston; the extension from Halstead, about thirty-five miles, to what was known then as Carman—I think it is called Redland now; the extension from Park Rapids to Cass Lake; the line up into the iron country, from Brookston to Ellis—forty-six miles, I think; the main line from Hibbing to Virginia, in the iron range; and some ten or twelve miles, more or less, of mining spurs in the iron regions; then I built a short piece of road from Thief River Falls north—I don't recall the length of it—all together, as I recall it, about say 425 miles, in round numbers, of lines in Minnesota, new track.

Q. Was that new construction distributed over different parts of the state?

A. Yes; yes, reasonably so.

Q. Will you also indicate some of the lines, as you can recall them, on which reconstruction work was carried on under your direction, rebuilding or relining, altering grades, and matters of that kind?

A. Well, getting down to details, small amounts of work, hither and yon, I don't suppose there are five consecutive miles in the state that I have not had something to do with personally

that there wasn't some engineering work done (outside of regular maintenance work) when I was connected with the road. The larger pieces of work of that nature were what was known as the Eastern Railway at that time, from Hinckley to West Superior. On that road we widened the banks, widened the cuts, took out all of the wooden bridging, either replaced it with permanent culverts and fills or with steel bridging, laid new rail, ballasted, lengthened the existing tracks and introduced a large lot more of passing and other sidetracks; built new engine terminals, including yards, engine-houses, coaling facilities, water stations, etc., at Sandstone; did a great deal of work in West Superior yards—but that was in Wisconsin; built the new steel elevated road from the crossing of the St. Louis river into the Union station at Duluth—practically rebuilt the road.

Q. The line from Minneapolis to St. Cloud—the East Side line—what work was done there under your supervision?

A. We did some bank widening, some ballasting and some new bridge work.

Q. The Osseo line, which is on the west side?

A. The same, only we did a great deal more work there of that same description. We took sags out of the grade where the banks had settled, as on that line they are continually doing; widening the cuts, put in new bridging; I think built some new buildings; laid new rail, and did some ballasting. On the Fergus Falls Division, so-called, from St. Claud to Barnesville, we widened cuts, widened banks, took out sags, restored the old grade line, laid new rail, I think nearly all the way, (a part of the way at least) and ballasted from one end to the other. On the Willmar & Sioux Falls, from Willmar southwest, practically the same,—widened the banks, widened the cuts, restored the grade lines, took out sags and reballasted, replaced the then existing wooden bridging with either fills, permanent culverts or steel bridges; put in side-tracks—a general reconstruction of the line.

Q. In this work have you built terminals, as, for instance, at Melrose?

A. I think, with one exception, under my direction was designed and built every important freight terminal in the state of Minnesota outside of the Twin Cities, and one of those was built during my time under my direction, that is the freight yard at St. Anthony. The ones that I had to do with were the Melrose yard and engine terminals, the Willmar, Carman (now known as Redland) and Cass Lake; I think every one, with the possible exception of Breckenridge, and that we added some to.

Q. Have you recently been over the lines of the Great Northern in Minnesota?

A. Why, I made a short trip a couple of months ago, a five-day trip over the principal lines of the Great Northern, yes, sir.

Q. In company with Mr. Hogeland, the chief engineer?

A. Yes, sir.

Q. And what was the purpose of that trip?

A. Why, I wanted to get a general idea of the road, how it looked, whether it had deteriorated or improved since my knowledge of it, whether it was well kept up,—to renew my acquaintance with it.

Q. In part in preparation to testify as a witness in this case?

A. Why, generally speaking, yes.

Q. Was it also for the purpose of refreshing your recollection as to the road and seeing what if anything had been done since you had been connected with it?

A. Yes, to a certain extent.

Q. Well, now, from your personal connection with the road and including your recent journey over the lines, are you able to say that you are familiar with the engineering and construction conditions in the state of Minnesota or in that part of the state in which the Great Northern lines exist?

A. Yes, sir, I think I am.

Q. Now, will you state something about the construction

conditions in this state, indicating what if any difficulties exist from a construction point of view more than exist perhaps in other parts of the country or other states?

A. Well, a certain part of the state of Minnesota through which the Great Northern line is built is swampy, boggy, treacherous material, poor material to build a road out of and poor material to maintain a track on.

Mr. HOLDEN: I suppose the railroad commissioners' map has been considered in evidence in this case, has it not?

Mr. O'BRIEN: It has been offered in evidence four or five times, I think.

The MASTER: I don't think it has been offered, but it has been referred to.

Mr. HOLDEN: I would like to hang it up, then, without any more formal offer just at this time in connection with this testimony.

Mr. HOW: I don't think it has been offered in this case.

Mr. O'BRIEN: I don't know about this case, but we have been using it now for two years in different forms.

Q. Showing you the official map of the railway commission of this state, there seems to be shown on this map a considerable amount of water in the way of lakes, rivers and things of that kind; now, I would be glad if you would state in the record from your knowledge of conditions just what those conditions are in reference to the construction of lines of railroad in this state.

A. Well, I had better premise by saying I suppose it is a well-known fact that a railway to fit modern conditions must be built on modern lines; that is, it must have fairly good alignment and, above all, low grades. To effect this a railway is naturally forced to follow the low ground; in other words, the valleys and swamps, as it would be impracticable to follow high ground as the Lord has made it and left it for us to work with, without prohibitive work to get the kind of lines that we must have to handle the present business. That means that we are

forced into swamps and into the valleys and driven into morasses and bogs which exist in not only the northern part of this state, but in my experience in Michigan, northern Michigan, Wisconsin and northern Minnesota. I think for a country offering as few topographical difficulties as these three states do, having no large mountain ranges, no very deep valleys to cross, that they offer greater difficulties and force more expensive work than any country where I have located, built or operated lines. That is particularly true on the so-called main line from Duluth through to Fosston; peculiarly true on a great part of the mining line; to a certain extent it is true on the Eastern Minnesota, somewhat on the Coon Creek line. Then it is a notorious fact among railroad men, constructors, particularly, that the material around the head of the lakes is about as bad as ever was attempted to be worked into a railway—the clay.

Q. Why?

A. I don't know, excepting it is like Topsy, it happened so.

Q. Well, I mean just what is the condition?

A. It is sticky and slippery; you can't hold it in place in a bank or a cut, or anywhere else, without covering it with some other class of material; and when you estimate on a fill as theoretically to contain so many yards, you don't know whether you are going to build your fill with that number of yards or fifteen times as many, probably somewhere between the two. That is from my actual experience.

Q. Now, you spoke in your testimony, a few moments ago, about the Osseo line, that you had taken out a great many sags there and that that line was constantly requiring that kind of work; are there any conditions on that line which will illustrate the point we are after now?

A. Yes, for a short distance out of Minneapolis we had a great many of these fills that were continually sinking while I was with the road—of course I have no knowledge of their condition at present—and we were continually putting in material

to bring them up to the grade line. That is true of a great deal of the line between Cass Lake and West Superior, miles of it.

Q. Would you indicate about how much of the state is subject to those conditions?

Mr. O'BRIEN: I don't think there is any dispute about the quantities, Mr. Holden.

Mr. HOLDEN: Not any great dispute, I don't think; as I understand Mr. Morgan's—

Mr. O'BRIEN: I don't understand there is any dispute about the quantities, and all of this is just in the interest of saving time. I don't think we dispute the quantities. We all know the muskegs exist there, you know; I think it was Mr. Stevens who used to say he couldn't find the South Shore & Atlantic with a sounding road every once in a while.

Mr. HOLDEN: Well, I think there is a difference of some six million yards; and, furthermore, we haven't got Mr. Morgan's records in this case yet.

Mr. O'BRIEN: Well, very well.

Mr. HOLDEN: And if we can cross that bridge, we might save a little time, but we have got to assume our case as we put it in ourselves.

Q. I was suggesting that if you could you might indicate how much of the state is subject to these general conditions.

A. I have had very little experience in the southern part of the state.

Q. Well, I mean how much of the state in which the Great Northern lies.

A. But I know from a line drawn east and west through about St. Paul, from there north, that wherever we strike the tamarack swamp or muskeg, so-called, there is always that trouble; at least, there was always danger of it, and it generally develops and it grows practically worse the farther north you go, because there are more swamps.

Q. How far west does that condition exist?

A. It exists until you get out of the timbered country, and there are some of the very worst swamps the Great Northern ever had right up here I think in Stearns county west of St. Cloud. Right out here west, within six miles of Minneapolis (I don't know whether those people themselves know it) in 1874 and 1875 when the Minneapolis & St. Louis built to Chaska, I know of a place where the grade line called for a fill of four feet where they put in piles 125 feet long. I don't know what the condition is now, but I happen to remember the incident, and you find those detached cases all through, growing more and more as the swamps get larger, until it culminates in this great region here (indicating). Here, of course, I don't know anything about it (indicating).

Q. Now, looking at that part of the map in which Ottertail county and Becker county and Douglas county exist, in which a large number of lakes are shown and in which certain of the lines of the Great Northern are constructed, are those conditions present in those counties?

A. To a certain extent, yes, sir. There is one fill, less than a mile east of Fergus Falls, that I don't suppose any mortal man knows how much material was put in that fill. For years they were unable to find any bottom or even to maintain the track across it. Now it shows about six feet fill, across a little shallow lake, but I wouldn't be surprised if that fill in places was thirty to forty feet under the surface. I just mention that as an instance.

Q. Now, then, in these parts of the state that you have been speaking of, is the local material of value in building your grade?

A. Generally speaking, only in a preliminary way, to enable you to get down rails. I am talking of the fills now; of course the cuts have to be taken out no matter what the material is. Generally speaking, the local material is peat and moss, and I have built temporary track with snow and ice, carried in water

in buckets and thrown on it and frozen it to carry the track until I could get construction trains on to haul in proper material, brought maybe for miles. As a rule, the material is unfit; as a rule, several years after the road is built, depending more or less on the character of the material, the underlying conditions and the weight of the traffic on it; the original material put in the bank absolutely disappears, goes out of sight and has to be replaced with other material. This process continues from time to time until the bank reaches what we call a state of equilibrium, which means it has either got down to a foundation that it can't sink any deeper or else is spread out to such an extent that it compresses the soft material until the latter is able to hold it.

Q. Now, in construction work under those conditions, to what extent have you been compelled to use piling or corduroy, materials of that kind?

A. Why, I have used them very extensively; not only on the Great Northern in Minnesota, but on other roads under similar circumstances.

Q. Is there anything that can be seen of such construction materials from an examination of the lines today?

A. Sometimes, if a man is experienced, there are certain indications left that will teach him that there has been trouble there; for instance, sometimes you will find yourself riding along on a train on a railroad bank, quite a height above the swamp, and on either side of you or one side (possibly both sides) you will see a bank that is higher than you are; that is simply material that has been displaced by the weight of the bank under the rails that you are riding on and pushed up from the soft material on the side, showing that the bank has settled. That generally teaches a man that there is more than is apparent at a casual glance. Sometimes we plan (engineers do) to build a fill and we are never able to build it, owing to the impossibility of making the bank stand; then we put in piling and renew it from

time to time. That very frequently happens. Those things should be apparent to a man of experience, where there is no particular drainage and a low fill (what should be a fill) when he sees piling, he should know that there was some trouble there so that a permanent bank could not have been built.

Q. Now, then, taking up the Red River valley, in which a considerable mileage of the Great Northern exists, what are the conditions there?

A. The soil in the Red River valley is very peculiar. I would not regard it at all as a first-class material for a railroad bank. Of course, railroad construction in the Red River valley is almost entirely bank. I have built very few lines, as I have explained to you, in the Red River valley, but I do know this: that taking the original profiles as the line was constructed, or at least as the record shows it was constructed, that years afterwards when we ran the levels over to establish the old original grade, we found that miles and miles of the original grade had practically disappeared; that is, the base of the ties was near, or in some cases into, the original ground, where the profiles and records, when undoubtedly the road was built, show from one and one-half to sometimes three feet of fill. It is evident that the records and profiles were right from the fact that the small bridges which occur abo[illegible]very 2,000 feet were at the original record grade; therefore it is fair to assume that the short stretches of bank between them were the same, but the fact remains that the grade had practically disappeared.

Q. You mean by that that it has simply settled down into the ground?

A. I presume so.

Q. Or washed away, or which?

A. I don't think it washed away; I think it settled down, because whatever water is up there is generally still—water across this place, so it couldn't have washed out.

Q. What is the value of local material in the Red River

valley for building a grade and maintaining it?

A. Well, the value is great because you haven't anything else—

Q. But what effect does it have—

A. —but to build and maintain a first-class road, you must supplement it by material brought in by train.

Q. Hauled in by train from—

A. Wherever you can get it.

Q. In connection with your preparation for giving testimony in this case, did you consult with Mr. Hogeland, the chief engineer of the road, in reference to this map which is marked Ex. 1—Hogeland, which indicates a plan of proposed construction of the lines in Minnesota in a period of eight years?

A. No, sir, not as to details.

Q. Well, since that map was prepared by Mr. Hogeland, have you considered it?

A. I have looked it over casually, yes, sir.

Q. Well, you know the purpose for which the map was made up?

A. Yes, sir.

Q. I desire you to express your judgment as to the plan shown on that map.

A. My judgment as to what?

Q. As to that being an economical and reasonable method of reconstructing the lines in this state.

A. Why, I presume, Mr. Holden, you can make a great many combinations and plans for rebuilding this road, or any other in the state, in one year or eight years. I haven't gone into the details of Mr. Hogeland's proposition there enough to say whether it is the best or the worst. I will say this, though, that it is thoroughly practical, and the underlying principles that he has evidently based it on are thoroughly sound. It may be that on extensive study I could formulate something that would suit me better, it may be I could not, but that is a practicable plan,

and I judge a very economical one, taking everything into consideration.

Q. Now, it appears from this plan that the proposition would include in the first year, beginning construction outside of the Twin Cities, in the vicinity of the head of the lakes, and also out of Crookston, at three different points in three different parts of the state. Is it your judgment that that would present an economical method for making a beginning?

A. I think so. The only practical way to build a railway, to command the necessary force and organization, is, generally speaking, to employ some large, well-known contractor or contractors. These men have a clientele or a following of sub-contractors and sub-sub-contractors; some of these men are, as we say, well fixed in plant and in money; they have steam-shovels, engines, cars, rails, and all the expensive paraphernalia that enables them to do heavy work cheaply; at the same time he will have a following of men who have a large number of teams, wheel-scrapers and things of that sort, drag-scrapers, that cannot economically do the extremely heavy work. Then he will have a still further following of little fellows with a few teams, a few drag-scrapers, and we get down to the shovelers and station men. Now, to maintain his supremacy as a contractor, he has got to provide work for all of those men or he will lose them; consequently no sane contractor, unless he is paid an extraordinary price, will take any special piece of work to carry it through a season or seasons. He will insist, if he can get it, on getting a variety of work; like the meat in a turtle, he wants all kinds, and it is proper that he should have and it is a good thing for the railway company. And Mr. Hogeland's idea undoubtedly is, in distributing his work that way, to provide the different classes of work for the different classes of men that he must necessarily employ to do his work economically and quickly; and therefore when he went up to the Red River valley, I presume he went there with the idea of getting the lightest

kind of side-work, at the same time the distribution of the other work included the very heavy, (as I happen to know) out of Duluth. The lighter some distance out, and reasonably heavy work outside of the Twin Cities, so in that way he got the proper distribution to enable his contractor or his men to do their work economically and quickly.

Q. From such consideration of the question as you have been able to give, what effect on the cost of reproduction of these lines would it have if the period of eight years suggested were materially shortened?

A. Well, Mr. Holden, that is a pretty large question. Generally speaking, when you speak of construction only, the longer time you can give, within reason, to build a piece of line, the cheaper it can be built. The conditions are such to reproduce the line of the Great Northern in this state, as to complicate the situation very materially. I have no doubt that if orders were given today and you could start your organization, your preliminaries the 1st of April, next week, that it would be at least a year before you would be actively engaged in the field that would advance you very much. Your organization, your finances, and above and before all, your right-of-way, would delay you from six months to a year before you could get fully organized and actively at work on the part that you expected to build in one year. Unless the organization was completed, the work covered as far as it could be year by year, the same conditions would hold true in shortening up your eight years at the last end of it. It is almost an axiom among railroad engineers and builders that you commence to build a railroad when you have got your track laid. Now, of course, that isn't true with heavy lines, where the grading is heavy, heavy bridging and everything of that kind; but it is very apt to be true largely in point of time, when you expect and do make your railroad an effective transportation machine; it is not at all when your track is laid nor when your ballasting is done. Therefore, to turn the

proposition over at the end of eight years, as a commercial proposition, 2 300 miles odd in this system, complete in all its details, with all of its auxiliaries, its accessories, in the shape of shops, buildings, coaling and water facilities and everything of that kind, you should allow, in good common sense, at least a year for the odds and ends and the pickups after you think you have got your road done. Now, practically you are cut down to nearly six years of actual construction in the field. It is entirely possible—everything is possible with money, pretty nearly,—to build the road in less than eight years; it is also possible, undoubtedly, to build it cheaper in more than eight years; but I think, upon a fair, candid consideration of the whole thing, I would be inclined to say that Mr. Hogeland's estimate, or whosever it is of eight years from start to finish, from organization to final completion, as a completed road must be, is fair and would be an economical arrangement.

Q. One other question upon the matter of ascertaining the quantities in a given piece of track: one method would be to make an actual inspection or to take measurements on the ground, would it not?

A. I didn't quite get your question.

Q. I am taking up the question of ascertaining the quantities that may exist or may have been put into a piece of track. I say one method would be to go out on the ground and inspect and measure it; another method would be to examine the profiles, and a third method would be to examine the records of the actual yardage; am I right about that?

A. Yes; they would all be methods of different values, however.

Q. What I would like to get at from you is an expression as to whether a physical inspection or present measurements of present conditions (that you can see) or even an examination of the original profiles will disclose the entire quantities which are going into a grade.

A. As a rule they will not.

Q. Is that more truly so in a state such as Minnesota than in other states, where you cross so much water and swamp?

A. Oh, certainly, as I explained before, a great deal of the material will disappear; unless you had a record you would not know what had disappeared.

Q. Well, then, is it a fact that the only reliable record is the actual record of quantities that have gone in?

A. Why, certainly, that is the only reliable data that you can work on—is your absolute record.

Q. Now, then, in addition to that—

A. There are no records, however, that are perfect.

Q. I was going to ask you as to whether or not those records would include all quantities in a line such as you have been talking about.

A. You mean in yards?

Q. Yes.

A. No, sir, they do not.

Q. Now, just why is that?

A. Simply because there are many parts of the work that cannot be put into units, into yards; they must be measured in money. The matter of practice and experience has shown that.

Q. Now, have you taken occasion to examine Ex. No. 2—Hogeland, which I now hand you?

A. Yes, sir, I have looked it through.

Q. Have you given consideration to the different tables covering construction items?

A. Yes, sir, I have run them over.

Q. Well, in giving your consideration have you had opportunity to consult with the records of the Company at their offices in order to ascertain to your satisfaction or to ascertain what you desired to your satisfaction in order to express a judgment upon certain parts of this exhibit?

A. Well, what parts do you refer to?

Q. Well, I am going to come to them in a moment, but I simply want the general fact whether you have had an opportunity of consultation with men and records to ascertain whatever you might desire in order to pass judgment upon some of these—

A. I haven't examined the records.

Q. You have ascertained the fact or the way that this exhibit has been made up?

A. Yes, sir.

Q. And necessarily you have assumed that wherever the records have been used those records have been honestly and intelligently shown in these statements?

A. Why, I believe so. I want to say, Mr. Holden, about the records: I have always been considered a good deal of a crank on records, and I never have in all my practice allowed a man (engineer) to keep his notes as engineer on his cuffs or on an envelope to be thrown away; I always considered the records the property of the railway company which they went to the expense of obtaining and which they were entitled to. When I came to the Great Northern road as chief engineer in 1903 I found the engineering records in very good shape, indeed, as compared with some records of other roads. They were somewhat scattered, they were not properly indexed, but the material was there; throughout the years that I was chief engineer I instituted a system; in other words, I collected these records, I systematized them, indexed them and got them together, so that at the time I left the Great Northern road I am well satisfied, as I have a pretty wide acquaintance throughout the United States with the chief engineers of the different railroads, that the Great Northern had probably the best set of engineering records in the United States, or among the best. I believe from my knowledge of the men and of the man who has had charge of them since my time, that they are not only very much better than I left them, but they are now superior to any in the United States; and I believe, too, from my knowledge of the man and

men who deduced these known quantities from the records they would be absolutely correct, or as nearly as human skill or knowledge can make them. Therefore I am inclined to accept them.

Q. Well, upon that basis, then, I would like to direct your attention to item No. 2 of that exhibit, which contains an estimate of the item of grading, clearing and grubbing. In that connection there was offered in evidence Hogeland's Ex. 3, which purports and was stated to be a compilation of quantities which have actually gone into the lines in Minnesota, under four chief heads; the first were the quantities for which contractors were paid on original construction; the next was based upon estimates made on profiles on file in the office; the third column is based upon extra work on record; and the fourth column is an estimate of extra work not on record, amounting to four per cent of the total; the total amount shown is 61,363,800 yards, which is the same amount shown on column 3 of item 2. Have you examined these two exhibits so as to be able, from your general knowledge of the system, to say or to express an opinion as to the approximate accuracy of those quantities?

A. I think as far as column 1 is concerned, the quantities for which contractors were paid, there can be no question. As far as column 2 is concerned, which is a profile estimate, which I understand is for parts of lines where there were no records of amounts paid contractors, I think it is approximately correct and probably as nearly so as can be made; extra work on record in the third column is undoubtedly very nearly correct, if not quite so. The system that the Great Northern did, and I presume has pursued in regard to that, would make it almost impossible for any serious error to creep in, owing to the reports that were obliged to be made either by yards, actual cross-sections of the engineers or quantities from carloads by the superintendents, and in other ways would preclude any great error. The only thing that amazes me in this exhibit, and I must con-

fess I am very much surprised, that there is only four per cent that is not accounted for in some or other method of record; I should have said, if my judgment had been asked, that fifteen per cent would have been a legitimate allowance.

Q. Putting that perhaps in another way: from your knowledge of the system, is it your opinion that the four per cent includes all the extra work that has gone into the lines and which is not of record?

A. Oh, no. You never get all the work that goes into a railroad in the record, nor you can't guess at it.

Q. So, then, is it your judgment that, as shown by that exhibit and on the assumption that the exhibit has been honestly constructed, there is seventy-three per cent of those quantities based on absolute record?

A. Seventy-three, where did you get that?

Q. (Indicating.) That is forty-three and thirty.

A. Yes, I should say so.

Q. And in addition to that, the second column, based on profile estimate, is there any way in which it can be stated how nearly accurate, if the estimates are carefully made, that that should be?

Mr. O'BRIEN: I think that we ought to at this time submit an objection to this line of examination; it is the first time that I ever knew of a witness being called to state his belief as to whether another witness' testimony was according to the facts or not, and we object to testimony along that line as incompetent.

The MASTER: We are receiving a good deal of rather peculiar testimony in this case, and I don't know whether this is within the line that we have already received testimony on, but the objection will be noted. Proceed.

Mr. O'BRIEN: I think that is true, that there has been a great deal—of course necessarily the witnesses have been compelled to receive information from subordinates as the testimony was

given, and matters of that sort, and there would be no objection to it, but it seems to me that this testimony goes beyond anything that has been suggested yet.

Mr. HOLDEN: The purpose of the testimony (in order that I may make a statement) is no different than that of the other witnesses that has been referred to, and Mr. Stevens is called both as an expert and as a witness having actual knowledge, and it seems to me entirely proper to submit these exhibits to him in connection with both forms of knowledge which he has so that he may express his judgment as to the facts shown on the face of the exhibits. Now, that is the purpose for which he has been called, and I don't see that the practice in that regard adopted in this case has been departed from.

Q. I think I was asking you to express your judgment as to how nearly accurate the second column of profile estimates is.

A. Do you mean this particular profile estimate, or a profile estimate?

Q. A profile estimate.

A. Well, that depends entirely, Mr. Holden, on the care taken in its preparation. Through an ordinary country where you have few sinking banks, you should be able to approximate very closely to the actual quantities. As a rule you underestimate always with a profile estimate.

Q. As a rule you underestimate?

A. Yes, sir.

Q. Now, then, summing all this matter up, I would be glad, if you feel that you can, if you will express an opinion as to the approximate accuracy of the total yardage shown in this item and this exhibit.

A. Why, personally I believe it is very close to the truth.

Mr. O'BRIEN: That is taken, I suppose, subject to the objection that was made, is it, Mr. Holden? I don't want to make objections, but if this testimony is taken subject to our objection, it will be satisfactory.

The MASTER: The objection will be noted.

Q. Now, at the foot of item No. 2 there is shown a table of prices of different classes of earth, also for other classes of material; are you advised of the division into which the earth items have been made in that exhibit, the different kinds of earth they have reference to?

A. Why, yes, generally speaking.

Q. I would be glad if you would give your judgment as to the reasonableness of the prices adopted in that table.

A. Why, I don't see any reason to criticise them, Mr. Holden. They look to me fair. I haven't had, for the last four or five years, any intimate acquaintance with the cost of grading different classes of work in the Northwest; I don't presume it has changed very much since I knew it. These seem to be about the same prices that we used to pay and that it used to cost us for earth work and other classes here.

Q. What have you to say for the hard-pan price of 45 cents and the loose-rock price of 55 cents?

A. I think that is all right, both of them.

Q. Is that true also of the price shown for solid rock?

A. At first glance, this price for solid rock seems to be high. In looking it over before, I found that a very large part of the 440,000 yards was located in the city of Minneapolis; I doubt very much whether that part through the city of Minneapolis could be handled for $4 a yard; therefore, if this is intended, as it undoubtedly is, for a general average of all the rock in the state, I think it is low.

Q. You say the Minneapolis rock couldn't be handled for $4 a yard; you mean under present conditions?

A. Under present conditions.

Q. The populous nature of the city, etc.?

A. Yes. I don't fix $4 as a price, but it couldn't be done for any reasonable price.

Q. There is a considerable amount of rock work, I think,

shown up around the head of the lakes; have you anything to say as to the character of that work?

A. It is notoriously hard and expensive and difficult to handle, the trap-rock at the head of Lake Superior.

Q. Why?

A. Because of its nature; it is tough, hard, hard to drill, it doesn't shoot well; that is, it doesn't break up well; it comes out in large masses, and it is well known among all contractors and engineers that it is a very difficult rock to handle and very expensive; it requires a great deal of powder, a great deal of drilling.

Q. Item No. 3 is devoted to protection work, riprap and retaining wall; from your experience and knowledge, will you state your judgment as to the prices shown there of $2 for riprap and $9 for retaining walls? You will notice from the exhibit that the retaining wall yardage is altogether in the vicinity of the Twin Cities.

A. Well, I think the prices are reasonable for both classes of work; it certainly is for riprap. Generally speaking, riprap means your rock must be quarried, in many cases reduced to the sizes and shapes that you can handle without expensive machinery, hauled long distances, a large part of it hand-blast. Yes, I think $2 a yard is cheap for riprap in any country. The retaining walls, as I recall them, are cement masonry walls; I should think that $9 per yard was a conservative price.

Q. Item No. 5 covers ties, cross-ties and switches. The foot of the exhibit shows a table of prices based upon as nearly accurate as may be a count or estimate of the actual kind of ties in the system; the first item is oak ties, of which it is shown that there is something over a million ties, and the price is eighty-five cents. I would be glad if you would state something about the market conditions of ties at the present time and your judgment as to whether it would be possible for that price to reproduce over a million oak ties in the lines of this Company in this state.

A. Well, unless the oak has grown very fast in the last five years it would be simply impossible. I know that you couldn't do it five years ago at practically any price. I don't think they are in the state, I don't think the timber is in the state to make them, within any practical hauling distance of the railroad lines.

Q. Where are oak ties to be obtained at the present time?

A. There is a good deal of oak timber left yet in Arkansas and southern Missouri, eastern Indian Territory, and farther south; there is a great deal in the Tennessee mountains, West Virginia and eastern Kentucky. That is the only great amount, and that is only comparatively great to what it used to be, that I know of, of standing oak timber in the United States. I am speaking now of white, post or burr oak. Red oak, of course, is unfit for ties. I had a pretty intimate knowledge of the oak-tie situation throughout Missouri and Arkansas and Indian Territory in my connection with the Rock Island. Of course, I know very little about the present situation in Minnesota. I can only reason from the situation as it existed and it has constantly been growing worse in the last twenty years.

Q. Now, assuming that the proposition is to reproduce that quantity of oak ties is it your judgment that the price shown there is a reasonable price?

A. Why, I think that is rather a peculiar situation; I don't think any price you are a mind to put in would bring the ties in Minnesota locally.

Q. If that price is largely based upon the price of oak ties at St. Louis, plus the freight rate to Minnesota, have you an opinion as to whether that is an unreasonable basis in considering the matter, on the basis of reproducing those ties?

A. If you brought the ties from the South, they would cost you 85 cents, at least, delivered here; I can tell you that.

Q. Now, with the like assumption that we were to reproduce the other kinds of ties shown in the table, will you express an opinion as to the prices there?

A. Well, I am not so positive about those prices as I am about the assumed price for oak, for I have lost track of the situation a good deal. I know this, though, that ties are getting scarcer and scarcer and harder to get every year, and consequently more expensive; and if I was called to say that I was going to get these ties running over a period of eight years from now, I should say that the prices were none too large, probably too low. How it is just at the present time I couldn't say. I think we all know that timber of all sorts is not going to be any cheaper until we abandon the use of it very largely as we are using it now and substitute something else.

Q. Well, what is the comparative value of oak ties and ties cut from other woods which would be used as a substitute for the oak?

A. It depends entirely on your traffic. With heavy, fast traffic, heavy freight trains, fast passenger trains, why, an oak tie is a more economical tie than the softer wood, because the softer woods will what we call spike-kill, will not hold the spikes, they are constantly drawing the heads of the spikes, and you don't get the life of the wood; so far as the life is concerned, you "kill" the tie by the cutting of the spike. That means you have got to use tie-plates on soft ties, not only to lengthen the life of your ties, but to make it safe to handle the traffic, to hold the track in gauge and line of surface, so that, per se, the raw oak tie is of a good deal more value than the tie of any other softer wood.

Q. Well, have you a knowledge as to what it costs to treat ties?

A. Oh, in a general way, yes. There are methods of treatment and other methods of treatment. I think the most approved treatment of pure creosote, or the first treatment with a preparation of zinc, and then followed by creosote, is probably the best that has been developed yet; a thorough treating with creosote in this country will cost, according to circumstances,

anywhere from, oh, I suppose 16 to 30 cents a tie, according to the size of the tie and the kind of timber and the amount it will take; 25 cents for a thoroughly treated tie, I think, is none too big an estimate.

Q. Well, in considering these prices shown on that exhibit, have you consulted the purchasing department to ascertain the prices which they have been paying for ties during the last year?

A. No, sir.

Q. Well, were you advised by the purchasing agent of some of the facts in that regard?

A. I haven't exchanged a word or a letter, either one, with the purchasing agent, on the subject of ties.

Q. Well, to make clear what I have in mind, there has been shown in this case circular notices which the purchasing department put up in the state calling for ties and showing certain prices; have you been informed as to the number of ties procured in that way?

A. No, sir, I don't think so, at least I have no recollection of it.

Q. Well, I am misinformed then.

A. Oh, I recall now what you refer to, I think. I did see a letter from the purchasing agent.

Q. Well, that letter, which I will hand you to refresh your recollection, states the prices which have been paid for tamarack and cedar ties during the last year. On the basis of those prices are you able to express any judgment upon the prices shown in the exhibit?

A. I think the prices shown in the exhibit on this showing are very fair and conservative. I don't know about last year's prices, but to build the road in the next eight years to come they would certainly be very conservative.

Q. Is there a different set of conditions affecting the supply of ties perhaps, than would affect other materials that go into the road and which would result in enhancing prices, on a prob-

lem of this kind?

A. I don't quite understand your question.

Q. You said a moment ago that the tie material was getting short in this country; would that fact have a bearing, if this road were to be reconstructed in a period of ten years, toward largely increasing the cost of the ties?

A. Why, undoubtedly.

Q. Would that be true to the same extent on other materials that would go into the road, such as iron and steel, or is there a difference in the tie matter in that regard?

A. Oh, no, the timber is disappearing and can't be replaced as iron and steel. We have reserves of iron ore and reserves of coal yet, so that we can determine the market value of iron and steel, but we have no reserve in the matter of timber.

Q. So in the matter of timber, a safeguard of this kind would result in a higher range of prices?

A. Yes, and, too, you must understand that the life of a tie we might take at eight years—I think that is a proper assumption here for most woods, maybe nine, in certain exceptional cases more than that, but long before all of the ties are all gone and have to be taken out, you have to commence replacing the ties, as I said before, owing to spike-killing, owing to inferior timber creeping in; so you place a tie in the track today (or a million ties) in two years you will be taking out some of those ties; in three years you will take out still more; in four years still more; so at the end of the eighth or ninth or tenth year—whatever is the life of the entire bunch of ties—you will have taken out long before that life is reached a very large proportion of them. So your construction here, assuming that you wanted a certain number of ties each year, you would have to have an additional supply to take up the ties that would be destroyed and taken out of the track long before the end of the eight years; in other words, you would require a great many more ties than the construction estimate would call for, which

of course, would draw still further on your available source of tie supply.

Q. I think we will pass on now to one of the next items, which is ballast. In connection with item 6, have you considered and seen Hogeland's Exhibit No. 6, which is a table of actual prices paid for ballast work on the system from 1901 to 1908?

A. Yes, sir, I have looked it over.

Q. From an examination of those two exhibits, I would be glad if you would express your judgment as to the price shown in item No. 6 of 62 cents per yard, and also your opinion as to the quantities shown on that exhibit.

A. Why, as to quantities, they look to me reasonable from what I have seen of the road and my back knowledge of it, the parts that were ballasted. I notice some of it was work I did myself. I would not doubt the correctness of the amount of ballast at all; I would not be in a position to.

Q. Will you express your judgment as to the price charged there?

A. I think the price is reasonable and conservative.

Q. Now, Exhibit No. 6 shows these prices divided into several items; train service, labor, tools and supplies, repairs of equipment, pit-tracks, stripping pits and transportation. Will you state just what is embraced within the lines of the train service in ballasting?

A. Train service includes the expense of men who operate the trains, engineers firemen, brakemen, conductors, etc., watchmen, fuel, water, oil, waste and all the usual train and engine supplies that are employed in hauling the ballast from the ballast-pits to the point of unloading, and returning the empty cars.

Q. Is the cost of the train service subject to fluctuation because of conditions that may arise?

A. Oh, yes, like everything else.

Q. Well, can you state some of the facts in that regard?

A. Interruption from bad weather, when no work is in progress, your pit-trains are shut down and your trains can't run; in case of accidents, in case of washouts where your line is broken, you can't run trains. During such periods when your train is lying idle you are paying your men by the month, it don't matter whether they work or not they get their pay; they don't work by the mile but by the month, all your trainmen, work-train; you have got that constant expense going on all the time, that affects train service. Then there is a chance for spread in train service with ballasting owing to the length of haul, which affects it very materially; the character of your road, whether your grades are heavy or not, whether you have got bad track across swamps that you simply have to take a few cars and crawl across or whether you have got a fairly good new road to run on. I have handled ballast where I had to push one car at a time up to a swamp where the track had gone down, was under water, push a car across and pick it up with an engine on the other side and take it out to the siding coming back and getting the other car, and so on—take a half a day to get the whole train across one of those places. I have done that right on the Great Northern railway. Any of those things affects the cost of train service.

Q. Now, the question of repairs to equipment, are there any facts in that regard which you can state bearing on the cost?

A. Work equipment is subjected to very much harder usage than ordinary freight equipment; it is struck by the shovels in unloading sometimes; rocks are dropped into the cars that are picked up in the ballast-pits, and altogether it is hard usage, and the running gear of locomotives and cars as well are on ballast-pits full of sand, get cut or run hot—all those handicaps increase the cost of running repairs. Then again, so-called "light repairs" that can be made are generally made out in the country at a ballast-pit by two or three men without generally competent supervision. In other words, you can't put a $150 fore-

man out to take care of two men; so, whether it is right or wrong, gnerally the men are left to shift a good deal for themselves, three or four car men for repairers, and their work is not very efficient; that is, you don't get the full value of a day's work; and then there is more or less material lost in the handling around pits. All together it makes your expense of light repairs, so-called, heavy. On the contrary, when you have heavy repairs and your cars must go to your repair yards, they may be twenty miles and they may be 300 miles, they have to go there, and they have to go, of course, light both ways, back and forth; there is a special form of car generally that you have no back hauling for, and if they are crippled, they are chained up and hauled off and have to go light, which means heavy expense. So, all together, the repair on the work equipment when it is in active service is generally quite perceptibly higher than the repair of ordinary freight cars in commercial service.

Q. Now, the item of transportation charges includes, does it not, merely the transportation of men and supplies for them, supplies for freight cars and matters of that kind?

A. I understand so; I have no personal knowledge.

Q. I was asking you generally speaking.

A. They are proper charges, yes.

Q. They are proper charges for the item of transportation of tools, etc.?

A. Yes. The item of transportation is a very large one in all work of that nature.

Q. Well. I would be glad if you would enlarge upon that matter. I omitted it in asking you some questions about one of the other items, but what is the fact as to the matter of transportation of men, from your experience? Does it result in an excessive amount or a very large amount of transportation to be furnished in order to maintain a number of men on a piece of work?

A. Almost universally. In many cases it is something

frightful the amount of men and number of men that has to be taken out to do the work for which the company in a large way gets no benefit whatever from their services. I have had instance after instance; in fact I have never had a piece of work yet, among the many I have had to do with, where that condition didn't prevail.

Q. Well, I would like to have you state a little further in detail about that. Have you any examples in mind which would illustrate it, perhaps, shortly?

A. Yes, I recollect one on the Rio Grande that was brought very forcibly to my mind at the time we were building across—

Attorney General YOUNG: Now, if you will pardon me, I think we will object to experiences on the Rio Grande being injected into the Great Northern.

WITNESS: Well, I will give you an experience on the Great Northern. I had charge of the Cascade tunnel in Washington—

Attorney General YOUNG: If your Honor please, let me ask is this testimony as to the cost in Minnesota, or are you referring to the cost of the system? If you are limiting this to the cost in Minnesota, I could understand that to be the subject of Mr. Hogeland's exhibit; it seems to me, in all fairness, that the testimony ought to be directed to conditions in Minnesota.

Mr. HOLDEN: It seems to me it has a direct bearing on the question of the transportation item which enters into not only the ballast but into certain other items which are large and important in this exhibit; and while it is not claimed that the actual fact or actual incident that the witness is now speaking of bears directly upon any Minnesota cost, yet it in my opinion is testimony which illustrates and has a bearing; that is the reason I think it is competent and should go in.

The MASTER: I suppose unless such matters would be likely to occur in the construction or reconstruction of the road in Minnesota, it would not have very much bearing.

Mr. HOLDEN: That is exactly the point. I propose to prove

here, because the witness has already said that it is almost universal.

The MASTER: Therefore universal in the reconstruction of this road in Minnesota; that is, would there be instances of that kind?

Mr. HOLDEN: That would certainly make his experience in various parts of the country, if they are all more or less uniform in that regard, it would certainly indicate that it would be a fair statement to say that it would be universal in this state, and I think that would make his testimony competent, even in the Rio Grande country, which Mr. Young objected to.

The MASTER: Well, if he would say that those incidents were likely to occur in the reconstruction of this road, it would make the testimony proper.

Mr. HOLDEN: I intended to ask that question after he stated the incident.

The MASTER: Counsel objects to that until it is made to appear that it is relevant or would be relevant.

Mr. HOLDEN: Well, then I will ask the witness the question, in order that counsel may be at ease.

Q. In the reconstruction of the lines of the Great Northern in this state, is it your judgment that in the matter of transporation of men it would be necessary, during the period of eight years, to furnish a large amount of transportation over and above the number of men actively at work at any one time?

A. It would be, undoubtedly.

Q. Well, now will you please state why?

A. Because the total number of men that are necessary, working at one time continuously, to carry out any particular job, will not stay, as we call it, with the work; they drift away, they are scattered; consequently, they have to be replaced, and this replacement is going on generally all the time; men brought in from the outside; so that, when you get through with the year's work, with the theoretical number of days' work of labor-

ers, you will find that you have exceeded that number by several times in the number of men you have sent on the work. I can't explain why they go, but I know it is an unfortunate fact that they do.

Q. Now, will you illustrate your opinion by any examples that you may have had personal connection with?

A. Well, take the Cascade tunnel, that I spoke of. That work, as nearly as I can recollect, required a constant force of between six and seven hundred laborers, of all classes, for about three years; those men were brought in, many of them from the east or eastern points, many of them picked up in Seattle, Spokane and different places. My office had issued, at the close of the work, as I recall it, from 16,000 to 18,000 passes from different points for men for that work, which was very many more times than the men that would have been required if the men had stayed with the work.

Q. Well, was there anything peculiar about the work at that point which brought about that condition, or has that condition existed in other kinds of work and other parts of the country that you know of?

A. It was tunneling work, of course; the men were well paid, well taken care of; it might be considered an extreme example. Certainly the results indicated that it was; but the same principle applies to all work.

Q. Well, has it applied in your experience to open construction work?

A. Yes, sir, very seldom that it does not. Of course, the scarcer labor becomes the more acute the situation is, the more difficult and expensive it is to keep them on the work.

Q. Are there any conditions involved in this problem of reconstructing the lines in this state which would lead you to think that a different result would follow, or would you have less difficulty of that kind than the average of that experience?

A. It depends on the situation of the labor markets. Taking

the labor market as it has been for the last ten years, I should say no; the conditions would be the same here.

Q. The next item is No. 7, and has to do with rails. Will you state, in a problem of this kind, of procuring that quantity of rails (and the same, I take it, would be true of the next two items, track fastenings and switches and frogs) where those quantities would have to be procured?

A. Well, there are only two sources of supply of rails in the United States, unless you go to foreign countries. One is the American Steel Company, known as The Trust, and the other is a few independent rolling mills. The greater part of the tonnage is produced by the mills of the American Steel Company. Those are located at different points, Chicago, Bethlehem and around Pittsburg and that vicinity.

Q. Would it be possible to purchase the requirements from those mills which would be necessary in this eight-year construction all at Chicago?

A. How many tons do you require?

Q. This is the total tonnage.

A. I don't think it would be possible to get it all in Chicago.

Q. Well, in purchasing rails and matters of that kind from the Steel Company, are the orders distributed around to the different mills and in different parts of the country?

A. That is my understanding. The Steel Company has very many customers, and their tonnage runs up to enormous figures. They aim to treat their customers all alike and make them prompt deliveries, that is, deliveries at the agreed time. If they should undertake to turn out 300,000 tons from Chicago, they would have to do it for a certain length of time to the total exclusion of all the other customers. They wouldn't do it at all; they would make you take part of your rails from Pittsburg, for instance.

Q. It has been testified that in the price shown on item No. 7 is included a handling and inspection charge of 28 cents;

have you an opinion as to whether that is a reasonable amount?

A. I think it is reasonable.

Q. Item No. 10 covers track laying and surfacing, and in connection with that item, Hogeland's Ex. 7 was offered in evidence showing the actual prices paid for ten years by the Great Northern Company; have you examined that Ex. No. 7?

A. I have looked it over, yes, sir.

Q. What class of labor is involved in this kind of work?

A. Why, there are different classes; we have the regular track layers, they style themselves spikers and gaugers and liners, etc., and so on. They are generally paid a better price, always have been paid a better price than the ordinary common laborer, such as shovelers and tie-rustlers, generally from about 75 cents to $1.50 a day in excess, depending on the supply. It is a case of supply and demand, the same as with anything else.

Q. Is it a class of labor that calls for experienced men and to some extent skilled labor?

A. Oh, yes, as a rule. Of course, an experienced man is better than one that has no experience, although, on the other hand, you can take a man if he is bright and wants to learn, in a short time you can make a good man of him; but then, of course, you pay him the extra price.

Q. Now, from an examination of the actual prices paid as shown on Ex. 7 and in connection with your own knowledge and experience I would be glad if you would express your opinion as to the prices shown at the foot of item No. 10 for track laying.

A. Why, it looks to me reasonable. I notice that on the first six of the lines, some of which are quite important, I laid the track myself, in other words, it was done under my jurisdiction; I have a distinct recollection that I did it as cheaply as I could do it. About the balance I don't know; it has been laid since my time.

Q. Well, does the same testimony which you gave in reference to ballasting apply approximately to the subdivisions of the

cost items for this class of work?

A. I should say yes.

Q. I would be glad if you would state whether the contents of that Ex. No. 7, assuming that that was honestly and accurately compiled from records, presents a fair basis upon which to make an estimate of the cost of track laying in this state.

A. With the same price of labor as obtained when this work was done, I should say yes.

Q. Now, Mr. Stevens, without taking up too much time, there follow in this Ex. No. 2 a number of other items, including bridges and trestles, track and bridge tools, fences, stock yards, water stations, coal stations, and station buildings and miscellaneous buildings and other additional items, all of which I understand you have examined as shown on this exhibit. I should be glad if you would state generally your judgment as to the fairness and reasonableness of the prices shown on those other additional items.

A. There are a great many of those items, a number of them, that it is impossible for me or any man to carry in his head for this length of time. Assuming that they are made from the records, as I understand they are, I would have no hesitancy in saying that the prices are reasonable and just. Many of them shown here were carried out under my jurisdiction; I am absolutely certain that the Company wasted no money; that is, I feel certain.

Q. Item No. 29 covers the subject of contingencies. There seem to be a selected number of items there upon which the item of contingency has been computed. Now, do those items fall into any general class in relation to the work?

A. Yes, sir, they do.

Q. State just what you find.

A. They are items to a very large extent that are affected by labor conditions and by accidents, casualties, fires, floods, etc.

Q. Now, will you state just what is meant by the term "con-

tingencies" in the engineering world?

A. Contingencies cover a class of inevitable expenses that are not, and, in my judgment, cannot be foreseen by an engineer in predicting the cost of a piece of work. Some of them arise through nature. through storms, through fires and unexpected developments in the ground that you are attempting to build your road over. We foresee as far as we can and cover in preliminary, preparatory estimates, all of the known factors that are going to enter into the cost of a piece of work; that is, that is the duty of an engineer; but as a rule, no one yet has ever succeeded (I confess that I have not, perhaps I am not as capable as some) I have never yet built a piece of work of any magnitude that would justify calling it an extensive job when I succeeded in covering in my preliminary estimates and the money I asked for, enough money to cover the cost of the work when it was completed. There are so many of these little things that creep in, that the aggregate sometimes is appalling, and it has become the universally accepted rule of engineers, and I think architects (all builders in fact) after they have exhausted all their sources of information as to prices of material, labor and supervision and everything else, to include a percentage, more or less in size, to cover what we might call the ignorance of the profession or their inability to pick out in advance these unknown sources of expense. Now, there is no accepted rule as to the amount of such contingencies. I have never known of a case where the percentage was placed generally on the entire job and every element that entered into it for less than ten per cent. There may have been lots of them, but my personal experience I am now speaking of; on the contrary, I have known of some that have been placed a great deal higher. I know of one of the largest jobs in the world where the contingency was placed, by probably as eminent engineers a number of them, as there are in the world, at twenty per cent. Well, that contingency is proving to run nearer sixty. That is an exception that

ought not to apply ever to railroad work. The items that have been cut out here,—if you will pardon me for elaborating on this—

Q. Proceed.

A. I notice what I would call fixed items, which justly there should be no percentage of contingency allowed for, like rails. Of course, there can something happen to rails; you can derail a carload of rails and you can bend eight or ten of them so you throw them into the scrap-heap, but the chances are infinitesimal of there being any damage to rails, so we eliminate that—at least I do. The same with your equipment; you may of course get fifteen or twenty even of the passenger coaches here in the St. Paul yards, going to go out on a new line, you may burn them up; but generally speaking, you would have them covered by insurance. But such items as have been taken here in which labor directly figures, which the railroad company pays for in a lump sum, like an engine or a car, should be covered by a contingent estimate

Q. Do I understand you that the general plan, however, in estimating a gross sum which will cover contingencies, has been to take a percentage of all the items?

A. Yes, sir; that has been the general rule.

Q. Not perhaps that there is a contingency on every item, but the percentage of the whole produces a sum which may cover the total?

A. As I said, Mr. Holden, the percentage of contingency is an allowance for what I may call the ignorance of the profession. Now then, the practical effect is this: we will assume that a man allows ten per cent on every item that enters into the cost of building a railway; he is really allowing more than that, possibly fifteen, for those items; with probably all, and surely some of them, he will meet with those conditions. So that, in eliminating, as has been done, I notice, on this sheet, the fixed quantities, the known quantities, the quantities that probably will

not be affected by contingencies, ten per cent here which I notice has been added, is really very much lower than that when you compare it with general practice.

Q. Now, it has been suggested that in a problem of this kind, involving as it does, the reproduction of existing lines, there are quantities, for instance, in grading which are known approximately and have passed into fixed quantities instead of contingencies, as they were when they were encountered. Now, does that condition apply to items other than grading items, that you now know of, conditions which perhaps you would not know on building a new line?

A. Well, it would probably affect grading to a certain extent, bridge foundations, something like that; there is no doubt but what it would affect it to a certain extent, but I don't think very much, if any.

Q. Taking that into consideration, will you express your judgment as to whether the method adopted by Mr. Hogeland of estimating and taking ten per cent on those items to cover contingencies is a fair and reasonable basis to be adopted?

A. I think it is.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. Directing your attention to item 38, which is the subject of interest during construction, are you familiar with the way in which that item is constructed and the plan adopted in constructing it?

A. Why, in a general way I understand that it is figured at six per cent, practically, for one-half of the time, the number of years.

Q. Will you explain that basis and express your opinion as to whether it is a reasonable basis to adopt?

A. Explain the basis?

Q. Yes, just how the interest is computed on half of the time,

what the plan is that is involved.

A. It figures out this way, and I presume that was the plan that was used—the plan I have used in other cases—in spending a certain amount of money in a certain number of years, theoretically you spend an even amount each year, or, in other words, if you are spending a hundred million dollars in eight years, you would spend one-eighth of that each year. Well, now, in this particular case here, I notice $104,992,000; that would be about $13,000,000 a year. Well, now, after the road is financed, or any enterprise is financed, you spread your payments for your labor and material over twelve months, you naturally would not draw for that $13,000,000 at the first of the year, you would draw on it from month to month or at a three-monthly period or six-monthly period; you wouldn't have the use of the $13,000,000 for the entire twelve months, but as railroad work was carried on from month to month, you would have the use of it for an average of six months. Consequently, at the end of the first year your interest charge, if your rate was six per cent, would be six per cent on $13,000,000 for one-half year. Now then, you go into your second year; at the end of the second year the amount of money that you would use during the second year, $13,000,000 would be distributed in the same way; you would have a fixed amount which would equal the interest at six per cent for six months on $13,000,000. In addition to that you would have sixteen per cent for twelve months on the $13,000,000 you used the first year.

Mr. BUTLER: Six per cent?

WITNESS: Well, six per cent, if that is the rate you are using. So that, at the end of the second year you would have the interest on $13,000,000 at six per cent which you had used the first year, plus the interest for six months on $13,000,000 you would use the second year. The third year you would have the interest on $13,000,000 for six months, plus interest on $13,000,000 for the first year, plus the interest on $13,000,000 for the second

year. Carrying that right through for eight years, the amount of your interest charges would be, as I happened to figure this today, the amount that is given here $25,181,000, which amounts, of course, to six per cent for four years—twenty-four per cent.

Q. You have observed, I suppose, that on the equipment items a different basis has been adopted?

A. Yes, sir.

Q. Will you please explain the reason for that, and your judgment on it?

A. Well, the logical reason to my mind is that in building this kind of road, scattered over that term of years, you would necessarily need only a small amount of your equipment until you got very well along in years with your railroad, got it built, you will not need it; you would only need what you would need to take care of the commercial business that was forced on you; and for your construction work naturally you would place your orders for equipment say in six years, something like that; that is, the bulk of your equipment would be coming along anywhere from we will say the fourth year; as I say, it would average probably about six years or seven. It would not be fair, to my mind, to charge interest legitimately over the whole term, because you would not need the money and you wouldn't pay it out; therefore you would have no interest charge.

Q. Now, you used the expression "the commercial business that would be forced on you." Will you state what you mean by that and what this item of commercial business which would be carried on during the period of construction amounts to, the character of it and the expense involved in conducting it?

A. Why, you would naturally, as your lines would extend, have commercial business offered to you, and as public common carriers you could not very well avoid taking that business and handling it as best you could, in conflict with your construction business.

Q. Just how does handling commercial business while con-

struction is in progress bear not only upon the expense of the commercial business, but on the expense of the construction work?

A. It makes it very much more expensive for both classes of work.

Q. Well, have you given this subject sufficient consideration in the light of your experience to be able to express an opinion as to whether such commercial business would result in a net return upon the value of the property devoted to it, in the light of the circumstances you refer to?

A. Why, with a new road and largely under construction, handling construction material, I doubt very seriously whether you would make any net profit. There might be circumstances and places where you would, but as a general rule I should say no.

Q. Well, could you express an opinion as to how long during such a period as eight years that condition would exist, that the commercial business, generally speaking, would not return—

A. Well, if the matter was in my hands and I was building the railroad and responsible financially for the operation as well as the construction, I certainly would not regard any commercial business as an asset during the eight years.

Q. Have you stated the reasons fully why you would reach that conclusion?

A. Yes, because your road, as I explained this morning, (or tried to,) is not completed until you get through entirely, the odds and ends picked up, your auxilliaries all provided, and everything of that sort. I would have to take a piece of road like this as a system and build it as a system, not segregated parts, but I doubt seriously if there is any segregated part that would pay commercially. Your track is poor; you have got construction trains; you haven't got your water service installed, your coaling chutes—everything is expensive to operate, and either your commercial business must be done at a heavy ex-

pense, or else your construction work must cost you more. That is my opinion.

Q. Well, stated differently, would you express an opinion as to whether there would be any substantial net return during this period of eight years from the commercial business which might operate as a credit upon the interest charge, or furnish any funds by which the interest could be partly discharged?

A. I should not expect any, and I would be happily surprised if I got it.

Q. Now, do you base this opinion upon your experience in constructing lines during your career as an engineer?

A. Largely, yes.

Q. Now, in this eight-year plan have you considered the matter of the construction of the terminals at the Twin Cities and at Duluth, so as to be able to state over what part of the eight years the construction of the terminals would extend?

A. Why, the construction of the terminals in these particular cases in the Twin Cities and Duluth would depend very largely on the securing of the necessary land for the right-of-way purposes. They are, of course, heavy and slow to build, and naturally you would spread the time as long as you could to get economical construction. There are so many elements that enter into the construction of terminals where the land is as expensive as it is here that it is impossible to even hazard an opinion as to the length of time that would be required. The only thing I can say is that it would be one of the very slowest things on the road to build.

Q. Well, would the amount of time that would therefore be consumed in building these terminals and getting them into effective condition have a bearing upon the commercial returns?

A. Well, you could not handle commercial business successfully or economically without the proper terminals, until you were provided with such terminals you would be working at a handicap. There is no other one factor that I know of, so im-

portant to a road as terminals. Without terminals the rest of your railroad is practically valueless.

Q. You are familiar with the terminals of the Great Northern in St. Paul and Minneapolis, I assume?

A. Oh, yes; I used to be very familiar with them.

Q. You know the location of these terminals in reference to the business part of these cities and in reference to the topographical conditions of the towns?

A. Yes, sir.

Q. If you can do so, I should be glad if you would express an opinion as to some of the elements of value which may exist in terminals such as these in St. Paul and Minneapolis in their relation to the railroad system and in their use for railroad purposes.

A. There are several elements that enter into and affect the value of railroad terminals in large cities, where your business is, we might say local. Of course exchange business between other railroads, through business, can be done outside and is done largely outside in many places. In this particular instance, it is done very largely at Minnesota Transfer; but what we might call the purely local business, the value of the terminals depends on several things, the size of your ground, the shape of them, very largely the shape,—and by that I mean whether they are in such shape they can be developed so as to get economical handling of switching movements; their proximity, whether they are near or far from the centers of business, is of course a great big factor in the value of the terminals. That is where in my opinion the terminals in St. Paul and Minneapolis of the Great Northern are of great value, almost geometric progression; that is, if they were placed three times as far away they would not be one-ninth as valuable; that is pretty nearly true. When you go into a city and establish local terminals of a railway, you get staggered sometimes at the cost of the land. Well, now, you say, "Now, I will be content with a little less business;

I will keep a little farther out." Well, we find, when we pursue that course, that the same reason that keeps you and John Smith and Bill Jones from coming, is going to keep ninety out of the other hundred people from coming, and instead of going twice as far away as your competitor and saving one-half of the expense and getting one-half of the business, you pay out the amount of money you expected and you get about one-tenth of the business.

Q. You mean the shipper won't come out to you?

A. No, sir; other things being equal.

Q. Considering the topography—

A. You were speaking about the relation of railways to commecial business. Without some well-defined and developed terminals you could not do the local business, even of Minnesota (the intrastate business) in these two cities or in Duluth. I expect it is true that you would not require possibly all of the terminals you have got here for the interstate business, but you must have a certain part of them, and those terminals must be continuous, straight through. Now, as I said before, the time requisite to build such terminals depends almost entirely on the time that it would take you to get the land. You might, for instance, get terminals from the end here—out half a mile, you might find beyond that a strip six hundred feet long that you couldn't get until you got your terminal strip beyond. Until you had got that strip, no matter if you had only laid one track across it, if now there are ten, your terminals are no good to you for any amount of business at all, whether small or large.

Q. What figure, in successful operation of a railroad system, do adequate and well-located terminals cut?

A. Well, I think they are the largest single factor. Poorly arranged, inadequate terminals, are the cause of heavy expense to any railroad. There are none of them perfect, and never will be.

Q. Have you an opinion upon the terminals of the Great

Northern in St. Paul and Minneapolis that you would be able to express, as to the character of them?

A. Why, I don't think the location of the terminals could be improved, taking the geography and the location of the wholesale houses, and the business and the topography of the two cities. There is no doubt but what they could be better arranged. You can always improve on anything if you take time and money to do it, but taken as they run, by and large, they are very good terminals. You are forced sometimes to make arrangements that you would not like to do if you could start in from the beginning.

Q. In your examination this morning, reference was made to item No. 2 of Hogeland's Exhibit No. 2, which is the item relating to grading, clearing and grubbing, and also to Hogeland's Ex. No. 4, which is a showing of actual prices for a period of approximately ten years on the Great Northern lines, and I would like to direct your attention once more to that subject. It was testified to by Mr. Hogeland that Ex. No. 4, being taken from actual experience, showed an average contract price of all of the thirty-eight different pieces of work of 33.4 cents, and that the average cost per yard on those pieces of work was 44.8 cents, making a difference of 11.4 cents, which Mr. Hogeland characterized as a "constant" which appeared from that experience to be fair to add to contractors' prices to cover extra bills. Are you able from your experience and your knowledge of Great Northern construction conditions in this state, and from an examination of these exhibits, to express an opinion as to whether such a constant in the way of an addition to the contractors' prices would represent fairly and reasonably the experience in this state in the matter of extra bills?

A. There are always extra expenses over and above what you pay a contractor for grading, in Minnesota and everywhere else. The state doesn't make any difference, and no one line will; the result of those extra bills, etc., and extra expense of

one line is not always the same as another, so I don't know whether the word "constant" is a fair expression or not. There is always a surcharge that must be made to the money you pay the contractor for other expenses than grading. Looking over these records, assuming that they are correct records, I would have no reason to dispute the 11 cents that he has figured here.

Q. Well, would you care to express your own opinion from your experience in this state as to whether that is a fair addition?

A. Why, I could not, depending upon my memory, go back to all those years and say what the average would be.

Q. No, I wasn't asking you to state any exact experience of any particular piece of work, but I didn't know whether you had an opinion based on your experience which would enable you to say whether that was a fair figure or whether it was not.

A. Why, it would seem to me to be fair; I could not guarantee it one way or the other, you know; it might be more and it might be less.

Q. Well, now, will you state what goes to make up these extra bills—what are the chief items involved?

A. Well, let us see how he has made this.

Q. I can shorten it perhaps. I want to direct your attention to the subject of overhaul.

A. Why, overhaul is an element of expense, of course, where you have a haul to make and do make.

Q. Well, just state briefly what is meant by that term.

A. Why, the usual practice is, has been and is now, so far as I know, that in a line where there are cuts and fills (as most lines are) the contractor is paid a certain price for every yard that he takes out of the cut, and he has to deposit that in the nearest adjacent embankments within certain definite specified limits; it may be five hundred feet, it may be one thousand, it may be fifteen hundred; and he gets nothing except his first price in the cut for hauling the material and putting it into the

embankment. When he reaches that point, if the engineer requires him (which he can under the terms of the express contract and specifications) to haul the material any farther, then he gets a fixed price per yard for the haul for what we call the overhaul; say for every hundred feet he hauls a yard of dirt over that limit he gets the price whatever it happens to be.

Q. From your knowledge of present methods of doing such work as that, is that a common and customary provision?

A. It always has been as far as I know, and is yet.

Q. Well, what other method is there than that which might be adopted?

A. Well, I don't know any other method that will protect both the company and the contractor where long hauls must be made.

Q. Well, is there a method of wasting everything that would otherwise have to be hauled over a thousand yards, if that was the limit fixed?

A. You can waste if you provide room to do it and room to borrow, it is rather an extraordinary way of building a piece of road to my mind.

Q. Well, why? Just state your reasons why you express that opinion.

A. In the first place, it requires a great deal more of right-of-way.

Q. You mean more ground upon which to deposit this surplus material?

A. More ground on which to borrow and more ground on which to deposit. In the second place, every year we are getting more civilized and paying more attention to the beauties of nature, and we are not expected nor allowed to pile up material, especially around towns, in mountains, or to dig holes in the ground for water-holes; the board of health complains about it. The clean way is to take the material out of your banks and make your fills with it. That has always been found to be the

most economical. I can't say anything about the borrow-and-waste—that is something I never did.

Q. In your experience and all your practical work, that is a method that you have never followed?

A. No, sir; I don't recall any instance where I ever did.

Q. Well, you spoke about it not being the more economical way; one of the reasons is you have to acquire borrow-pits, and many times you have to buy them or buy the right; another element would be you have got to provide the place to dump this surplus material?

A. That is what I mean by waste.

Q. As I understand it, an additional factor which enters into this method as being not the economical one is the wasting or throwing away of material which otherwise might go into the grade; now, is there a consideration of that kind which enters into the question of selecting which is the better way to construct a grade?

A. I don't quite comprehend the question.

Q. Well, the question perhaps is a little awkward. In excavating a cut, when you get beyond a point of a thousand foot haul, you have the opportunity, as you adopt one method or the other, of either wasting that material and not putting it in your grade, or of hauling it beyond as far as the engineer may think advisable?

A. Yes.

Q. And paying for the overhaul and putting it into your grade. Now, what is the limit to which that haul may economically and profitably be made before you would waste the material?

A. That depends on the unit prices the contractor is receiving for overhaul, and also for borrowing when he does borrow. Naturally, the engineer would order the material hauled until he reached a point where his overhaul was costing as much as it would to allow the contractor to borrow.

Q. Does the proximity of the next cut from which material may be obtained have something to do with the distance of your overhaul?

A. Oh, yes; sometimes the cuts are so close together you can't make any overhaul and you are forced to waste.

Q. And so, if I understand you, then, there is a varying point on this matter which depends upon your actual conditions in the particular part of the track in determining whether you will waste or whether you will pay for overhaul?

A Yes, sir; if I understand you right.

Q. Now, then, is there another element in these extra bills involved in transportation charges?

A. Yes, sir; usually.

Q. And that includes, does it not, transportation of men and materials and grading plant?

A. Yes, men and supplies, commissary supplies, grading plants, teams, and everything of that sort.

Q. Now, is an additional item that of digging ditches and re-arranging road crossings and matters of that sort?

A. Many times that is done, yes; many times it is almost impossible to gauge the cost of the value of a piece of work by yards; and while it is intended that the general contract shall cover all such work, in practice it is never carried out. Very often we ask a man to go off and cut a long ditch through a swamp where there is no particular yardage, mostly cutting stumps and things of that kind, and we pay what we call "force account"; that is, we inspect and find out what his force account is and pay him that, plus a small percentage for supervision. All these things are happening with any piece of work.

Q. Now, in this exhibit it has been testified that the transportation charges that have been shown are tariff rates. The assumption in Mr. Hogeland's testimony has been that other lines in this state are in their present condition and that lines of this and other roads in adjoining states are in their present

condition; will you state in a propsoition involving the reproduction of these lines according to the plan shown on the map, whether or not other lines would necessarily be utilized to a considerable extent in hauling materials and men?

A. Why, naturally they would have to be; I could not dissect the whole thing and give specific instances, but undoubtedly there would be.

Q. I want to get at whether or not in actual railroad construction work, as it goes on in this country now, that is not the fact, that large amounts of material and men are sent to the points where needed over existing lines.

A. Oh, yes; oh, yes, invariably.

Q. What have you to say about the transportation cost of getting your men and materials to the front, over your own line, as it is in the process of construction?

A. Well, I could answer that the same as I did with handling the commercial business. There is hardly any rate, tariff or otherwise, that will pay any more than the cost of handling such business as that in the shape that the lines generally are. Much of the material has to be hauled over track that is hardly ever well surfaced; some of it partly ballasted, some none at all; impossible to haul full trainloads; the liability to wreck and accidents is very great; the road-bed is new and soft; all these make your expense very heavy.

Q. Referrng to the matter of overhaul for another minute, what effect on the unit prices would there be if any provision for overhaul was left out?

A. Well, that would be a question I would not want to answer; I would have to take that up in a specific case. As I said before, the overhaul is largely to protect both the company and the contractor. Now, we have got in the habit, unfortunately or otherwise, in the West particularly, of the powers-that-be deciding on building a railroad and expecting within three days to get to work on it. In other words, we don't have the time to

prepare that they do in the old countries, or even in the eastern states. If we knew, a year or two ahead, that we were going to build a couple of hundred miles of road, after the final location was completed, we would thoroughly cross-section every foot of it with sounding-rods and augers, we would bore the foundation of every structure, and find absolutely what we had under us. If we would sink testing-pits, make borings of every cut, figure every cubic yard, lay out the work on paper in a comprehensive way and figure where every yard of material was going to, how much fill it would make, where the fill would stop, where the material would come from, have borrow-pits selected and tested the same as the cut, in fact, if every classification and all the details were known, all the hauls known, all the quantities known, and the nature of all the foundations for our structures known, then we could say to a man, "Here is a piece of work. We will guarantee to you these things are so and so; we will guarantee the yardage, we will guarantee the hauls, we will guarantee the classification; you will be called on to haul this and do that and nothing else." Then he could say, "I'll build that road for so much (a lump sum, perhaps,) I'll built it for so much a yard and no haul in it." He figures his own haul, but, mind you, he will put the cost of that haul in his unit prices just the same, it is there, like the drummer's suit of clothes. But we can't do that because we don't have the time. So then, the classification, which depends very largely on the engineer's judgment, and the haul are put in to protect the contractor; and if unexpected things come up and he is asked to do something that neither he nor the engineer foresees, then there is a price made to protect him. No railroad company—at least no respectable company—or the officers of a company or engineers, expect a contractor, if he honestly and intelligently manages his work, to do work for nothing, therefore it is only fair and just that the precautions be thrown around that will protect the company from excessive charges and protect the contractor from

exactions which the literal translation of a contract might entail.

Q. From your knowledge of this railroad system and your experience and your knowledge of the records of the Great Northern Company on those engineering items (construction items) have you been able to reach a conclusion in your own mind as to whether this Ex. No. 2 includes all of the quantities that might fairly be computed as having gone into these lines?

A. Why, I think that the exhibit is unusually carefully prepared. I believe that the records, as I said this morning, are as perfect as anybody's records and far superior to those of most of the companies, but I don't believe that it is humanly possible, with the records necessarily extending back over many years and records based on work in times when the necessity for correct records were not as well understood as they are now, for anybody to get up an estimate of quantities that will be exact, in other words, that will cover everything. If there is any error, nine times out of ten the tendency is an error of omission; that is human nature.

Q. Stating this in perhaps another way,—from your experience in this line of work, would you undertake to reproduce these lines upon the basis of the quantities and prices shown in that exhibit, as a contractor?

A. As a contractor, with prices of labor and material—material of course I know considerable about—with prices of labor as they have been on an average for the last eight or ten years, I would accept the unit prices, but I would not accept these quantities—nor anybody's—made up from records or guess or otherwise. If I took the work I would take it on the thorough understanding it would be measured and I would accept the quantities that I found at the time the work was done.

Q. By your statement that you would not accept the quantities you mean that you would anticipate that you would encounter larger quantities than that exhibit shows?

A. I would; yes, sir.

Q. Mr. Stevens, have you in recent years been engaged in work of the character shown by this exhibit?

A. No, not for two or three years.

Q. You don't understand me; I mean to say have you had occasion in your railroad work recently to make an estimate of the reproduction costs of any railroad system?

A. Yes, sir; I made an estimate of the reproduction cost of the New York, New Haven & Hartford line, within the last two years.

Q. How long did it take you?

A. I began in April, 1907, and practically closed last week.

Q. How many miles involved in that estimate?

A. About 2300, something like that. During that time, it is fair to say, I had an estimate made of the trolley lines in Connecticut and Rhode Island and part of Massachusetts, and that work did not conflict with the valuation of the steam lines in the least and it was handled by a different set of men entirely.

Q. And in doing that work did you have to encounter substantially the same character of questions that are involved in Mr. Hogeland's exhibit here?

A. Substantially so; yes, sir. Our final summary was based on practically the Interstate Commerce (so-called) classification. But you understand, (whether it is apropos or not,) that our records in that country are not the same as they are here; there is a great deal more work involved in even approximating an estimate in that country than here, in making a correct approximation down there than there is here, of a railroad.

Q. You mean because of a very large absence of any record down there?

A. Yes, sir. Practically every mile of the New Haven road, every cubic yard in it, so far as we could ascertain, of earth, rock, masonry, everything, was measured by men in the field; for months I had from 100 to 140 engineers and their assistants

in the field, besides a large office force. I have not got the returns but I presume that valuation cost us $150,000, actual expenditures in money.

Q. Well, now, in attempting to arrive at the present value of railroad properties, such as these lines in Minnesota, have you an opinion as to a method of this kind which has been called the method of ascertaining what it would cost to reproduce them?

A. Why, my opinion is, of course, of very little value. I will give it to you if you want it.

Q. Well, I think we want it.

A. I think it is perfectly worthless, any valuation of a railway, for any purpose whatever, excepting as a matter of curiosity to the stockholders or directors, if they want to know what it would cost to put it back again; I regard it as curiosity, pure and simple, when I get through with it.

Q. Doesn't that arise perhaps from the difficulty of placing anything like accurate values and including all of the elements that may be involved?

A. Let me ask a question of you, whether it goes into the record or not, what do you mean by the "value of a railroad"?

Q. Well, that is what we are trying to find out in this case.

A. Well, I don't know. You will have to ask somebody wiser than I am.

Q. Well, my question is, Mr. Stevens, with that problem before you, whether you have an opinion as to this method which has been adopted and which is practically the method you adopted on the New Haven as having a direct bearing on the real value of the property.

A. Well, I can answer that best by telling you what I did. I was given orders and undertook the job (very foolishly, I think) of finding out what the value of the New Haven road was as it stood. Well, I found out that I was wading in deep waters, and I commenced to analyze the different ways of find-

ing out and establishing what is the value of a piece of railway property. I discovered several theories. I discarded everything and finally concluded the only way was to theoretically reproduce that railway according to the present prices for labor and material, and that is what I did. That is practically the same as this method.

Q. Do you know of any other better way of arriving, as near as may be, at the present value of a railroad property?

A. Why, my experience, of course, has been limited to that case,—No, I don't know of any better way; whether this is the best way or not I don't know.

Q. Well, did you consider what other ways there were?

A. Why, I thought over a number of ways, yes. They seemed to me to be entirely chimerical and I dismissed them.

Q. And this method, in your judgment, is as good a method as can be adopted?

A. Theoretically, it is It is an impractical method, though, just the same

Mr. HOLDEN: I think that is all I have to ask.

CROSS-EXAMINATION.

By Attorney General YOUNG:

Q. You detailed to us this morning, Mr. Stevens, your extensive experience as an engineer in constructing railroads and your experience on the Panama canal—all of which you intended, no doubt, to show your qualification as an expert in the case now under consideration. That is true, is it not?

A. No, sir.

Q. As a matter of fact, there was no connection between the long period of experience which you have had as an engineer in the actual construction of railroads and the work which counsel have asked you to do in this case, was there?

A. I don't quite understand that.

Q. In other words, your period of experience was employed

in the actual construction of railroads where none existed before?

A. Largely, yes, sir.

Q. Or in the betterment of railroads where they did exist?

A. Yes, sir.

Q. The thing that you have been asked to express an opinion upon in this case is the cost, as counsel have expressed it, I believe, of reproducing a railroad, after first assuming that a railroad which actually exists did not exist, isn't that true?

A. Yes, sir; I so understand it.

Q. There is no real connection between the expression of an opinion of that kind and the knowledge that you have gained by experience in constructing railroads where none existed before, is there?

A. I think there would be; yes, sir.

Q. Well, in all your long years of experience, have you ever been called upon, outside of the work which you did somewhat of this nature on your own road, the New York, New Haven & Hartford, to imagine a road out of existence and reconstruct it?

A. Yes, sir.

Q. Then you have had no experience in that kind of work except the experience that you gained by attempting to do the same thing for the New York, New Haven & Hartford that Mr. Hogeland and Mr. Hayden have done for the Great Northern?

A. Yes, sir; I think I have.

Q. Will you explain?

A. I think where you build a railroad anywhere that one does not exist at the time, that you are attempting the same problem that you would be in reproducing this road if it was swept out of existence.

Q. Well, are you?

A. I think you are,—with the added advantage that you probably know, from experience, what certain costs would be in

this particular case and you would not in the other.

Q. Well, in trying to make up your mind what it would cost to reproduce a road, you are basing your estimate of that cost, are you not, on conditions which were brought into existence by the fact that the road did exist?

A. I try to eliminate from my mind all idea of a road existing at all; I take the ground as it stood before any improvements were made upon it, any cuts or fills, and place a certain road upon it.

Q. But in your value—

A. In other words, construct a line of railroad.

Q. What I am getting at, Mr. Stevens, is that in estimating the value of the real property that you would have to acquire (or the cost of it, if that expresses the idea better,) you would have to take into account the conditions that were brought into existence by the fact that the railroad was there; in other words, you would base your estimate of that cost upon the enhanced value which had resulted from the existence of the railroad?

A. Are you speaking of the real estate?

Q. Yes.

A. I paid no attention to the cost or value of real estate in those papers and know nothing about it.

Q. Well, you have, in a general way, expressed your opinion as to the reasonableness of the entire estimate, haven't you?

A. The part of it that I have testified to in detail.

Q. Well, do I understand, then, that you gave no opinion at all as to the value of real estate?

A. I didn't intend to give any opinion on real estate at all, I don't know anything about it, I wouldn't attempt to.

Q. Well, you have been testifying about the advantageous location of the right-of-way and terminals in these cities—

A. Yes.

Q. —and all of those things which are concerned with the value.

A. But I placed no definite values on them, I simply spoke in comparative terms.

Q. Didn't you testify in your opinion that the value given by Mr. Hogeland was a fair value?

A. Mr. Hogeland's figures but not those on real estate.

Q. And Mr. Hayden's also on real estate?

A. No, sir.

Q. And you did at least say or express an opinion on whether or not you would be willing to take the contract to reproduce the road, which would include, would it not, the acquisition of the right-of-way?

A. I didn't intend that at all; I mean the physical valuation, the physical parts of the road; I know nothing about the real estate—didn't assume to.

Q. We will have that matter cleared up, then, that your testimony is not intended to apply at all to the values of real estate, either at any of the terminals or to the real estate used for right-of-way in the system?

A. Yes, sir.

Q. Or the methods adopted for ascertaining that value?

A. I don't know anything about the methods.

Q. That reduces the application of your testimony to a far narrower limit than I understood it to apply to. But speaking about this method of reproduction of a railroad in general, you cannot get away from the fact, can you, Mr. Stevens, that so far at least as the real estate is concerned, you are assuming the existence of an impossibility; that is, you are assuming that certain conditions existed which resulted from the building of a railroad with the railroad which produced them out?

A. We are taking conditions as you find them regardless of how they arose.

Q. It is true, is it not, that a railroad is extremely peculiar in its relation to property—all property, I might say, in its vicinity—a railroad is a producer of value, not only in commerce

but in the value of property in its vicinity, resulting from the fact that it is, in many cases, the sole means of transportation and therefore one of the bases of commerce and, being a producer of value, if you were to undertake to ascertain the value of adjacent property at any time after construction, you would have to give to it the value which has arisen out of the existence of the railroad?

A. I have not considered that in this case at all.

Q. Is that one of the things that you had in mind when you stated at the conclusion of your testimony that you thought the whole method of estimating the cost of reproduction was a mere curiosity?

A. I referred to the matter as a whole, because it is an impracticability to duplicate or reproduce an existing railway.

Q. It is more particularly impracticable and impossible so far as real estate is concerned, is it not,—to some extent for the reasons I have stated?

A. Undoubtedly that is to a certain extent true.

Q. Now, you would not testify, as an experienced engineer, would you, that this estimate furnished by Mr. Hogeland and supplemented by the testimony of Mr. Hayden on the real estate values, is proof of the value of the Great Northern Railway System and should be so taken by the Court?

A. No, I wouldn't testify either way on that.

Q. You would say that if it is proof of the value it is news to you, in other words? You don't want to say that it is in your opinion?

A. Nor is not; no, I wouldn't want to attempt to settle such a question as that.

Q. It might, however, have some bearing on the question, might it not, in connection with a great many other things?

A. I don't quite understand your drift.

Q. I say it is not entirely inapplicable, it is proper enough to be considered as one of the things that has some bearing on

the value, is it not?

A. Why, I expect so.

Q. Another very important thing to be considered in ascertaining the value of a railroad would be the cost originally, would it not, and the amount thereafter expended for permanent improvements and betterments? Don't you think that ought to be considered?

A. I have no opinion to express on that, General Young.

Q. You would not consider that at all improper, would you, as one of the elements to be considered?

A. I wouldn't care to answer that.

Q. You do know, do you not, that these exhibits of Mr. Hogeland's do not show the cost or the amount expended for permanent improvements or betterments after the original construction?

A. Do I understand what?

Q. You do know that these tables do not purport to show the cost or the amount expended for improvements and betterments?

A. I understand they do.

Q. Did you understand that they did?

The MASTER: The original cost.

WITNESS: Oh, the original cost? No, I understand that is what it would cost to reproduce them at the present time.

Q. Mr. Hogeland testified, Mr. Stevens, that he did not undertake, in any case to give the cost, either of any of the buildings or structures or of any of the grading or the work expended in the construction of the road, except on that one exhibit where he took some of the actual experiences for the purposes of illustration.

Mr. HOLDEN: There were three or four of those exhibits, I think, General, on different items; they were on grading and ballasting and track laying, I think—the three.

Attorney General YOUNG: Well, those exhibits show that they were taken for illustration only and not offered as the items

of cost; he distinctly stated that he was not using cost as the basis of his testimony, as I understand it.

Mr. HOLDEN: I think we understand; that is right.

Q. Did you so understand this exhibit when you were giving your testimony—that is, Hogeland's Ex. 2?

A. I understood that Ex. 2 was an estimate of the cost of reproduction at the present time.

Q. Yes, and purported in many instances to take quantities, and, so far as structures were concerned, to take the plans and specifications, but in all cases to apply to them present-day prices?

A. Yes, sir.

Q. You understood that. It is true, is it not, take it on the subject of grading, that a very large amount of the yardage and a large amount of the work has been incurred and used since the road was put into operation as a commercial road; and it is also true, is it not, that most of those improvements were paid for out of earnings?

A. It is true there has been a great deal of work done on the Great Northern road in the state since it became a commercial proposition.

Q. That was paid for out of earnings?

A. It is true, probably, that to some extent it has been paid for out of earnings. That I don't know.

Q. Well, isn't that the ordinary custom?

A. No, sir.

Q. You think the Great Northern has, more than is the usual custom, paid for improvements of that kind out of earnings?

A. It is the usual custom, as I understand it, to divide the expense; whatever can be considered as maintenance is taken out of operating expenses; what is a straight addition, improvement, betterment of the property, is charged to capital account. I don't know how the Great Northern does. You asked me how it is usually done. I don't know what they have done.

Q. But under the head of maintenance, even, there has been a great deal done by way of improving the condition of the tracks and building up the road and bettering it?

A. Oh, yes, there always is.

Q. But in addition to that, the Great Northern railroad has always, has it not, maintained a fund for permanent improvements and renewals, which is taken out of earnings?

A. That is something I know nothing about.

Q. Well, do you know whether or not that is customary with railroads or are you familiar at all with the financing of railroads?

A. No, I don't; I am not prepared to say on that.

Q. Well, wouldn't it make a difference in your opinion as to the legitimate cost of reproduction if you understood that all betterments and improvements after the road first became a commercial proposition were paid out of earnings?

A. I don't see as it makes any difference on the question I was called to express an opinion upon—what it would cost to reproduce the road—where the money came from; that is outside of my field.

Q. It would make a mighty sight of difference to the public, wouldn't it?

A. That is something I wouldn't like to answer.

Q. Well, your testimony and the testimony of other witnesses bearing upon this question in this case you understand is being used in order to create a basis upon which to prescribe rates and compute income, and it is very important, upon an inquiry of that kind, to know, is it not, how much of the road is habitually paid for out of the capital account of the railroad and how much of it is paid for out of earnings and charged to the public?

A. Well, that is something I was not called upon to consider.

Q. Well, don't you think you ought to know that in order to testify on a question of this kind in a rate case?

A. No, sir.

Q. You don't?

A. No.

Q. If it were true that it was the custom of railroads to make their improvements and betterments out of earnings, whether they paid it out of a pretended fund for permanent improvements and renewals or whether they paid it out of what is known as operating expenses, so long as they were paid out of earnings it would make a very great difference, would it not, in the legitimate cost to the railroad company of reproduction?

A. I wouldn't feel qualified to answer that, General.

Q. In other words, the railroad company, if called upon to reproduce the road, would reproduce it to the extent only that they produced it in the first place, and so far as betterments and permanent improvements might be necessary, the presumption would be, would it not, that they would be paid for in the same manner that such improvements and renewals were paid for in the original road?

A. Well, I don't understand that I have considered that question at all; I have simply considered the estimate here that Mr. Hogeland has made, whether in my opinion it was just, according to the present prices, regardless of where the money comes from. My opinion on that point probably would not be worth anything, and I don't know as I have any.

Q. In other words, you can't give us any definite information upon that question?

A. No, sir.

Q. Well, you don't pretend to say, do you, Mr. Stevens, that it cost to build and construct the Great Northern Railway as it now exists, anything like the amount that is estimated by Mr. Hogeland as the cost of reproduction?

A. I don't venture an opinion, pro or con, only the one that to reproduce it this would be a fair estimate of that cost.

Q. And you didn't in making up your estimate of the cost of reproduction attempt at all to place yourself or to place the

road or the surrounding country in the condition that it was at the time the road was actually built?

A. No, I endeavored to take it as it is at present.

Q. Assuming that the Great Northern was the only road in this state—which I think we must, for the purposes of a consideration of this kind—it would not be possible, would it, with the Great Northern out of existence, to have the conditions which exist today, anywhere in the state?

A. I don't know about that. Undoubtedly if there were no Great Northern, there might be something in the shape of a substitute. That is a realm of speculation that I could not enter into.

Q. Well, if there were a substitute, the chances are that it would have been constructed under conditions similar to those which existed at the time the Great Northern was constructed?

A. Possibly.

Q. So that if we confine ourselves at all to the domain of reasonableness and presume that if the Great Northern were not there some other road would have been there, we still must find ourselves carried back to those early conditions, and those would be the conditions that would surround the construction and that would determine its cost?

A. The early conditions?

Q. The conditions that would exist at the time of the construction of this road or whatever road took its place.

A. The conditions would be as they exist today, as it would appear to me.

Q. Are not those conditions largely produced by the transportation facilities furnished by the railroads?

A. Undoubtedly the railroads have changed the face of nature and the face of the commercial situation.

Q. Yes, the railroads are the highways of commerce and are indispensible to the carrying on of commerce, are they not, in many localities, where there is no complete water transporta-

tion?

A. Yes.

Q. And therefore they are makers of value, and where there are no facilities for transportation there are no villages or commercial centers—cities—and we do not find, do we, that agricultural land is very much improved?

A. As a rule, no.

Q. In other words, railroads go hand in hand with the development of the country, and where there are no railroads there is no development—I might state it in short terms; it is therefore impossible, is it not, as a practical proposition, to suppose that a railroad does not exist where in fact it has existed for years and where its existence has produced conditions that could not be brought into being without it being there?

A. I think it is impossible to think that a railroad could be obliterated after existing for a term of years.

Q. And that is why you stated that this method of attempting to figure on the reproduction of a road is a mere matter of curiosity?

A. It would be to me, yes.

Q. Well, I think it would to anybody, and I am sure we don't differ very much on that. Now then, as to the quantities given by Mr. Hogeland in his various exhibits from which you have testified to some extent and upon which you have expressed an opinion, you have simply assumed that those quantities are correct and do not testify to them as of your own knowledge at all?

A. No, sir.

Q. You testified in relation to Hogeland's Exhibit 4 that you believed his unit prices for grading as of June 30, I believe, 1908, were reasonable?

A. Yes, sir.

Q. You also testified that there was something in addition to the amount paid contractors for the kind of work which would have to be added in order to get at the cost of the work to the

Company and therefore the cost of reproducing it if such a thing were undertaken, did you not?

A. Yes, sir.

Q. And you specified that one of the things that would enter into that item of surplus cost (or excess cost, rather, I should have said) would be overhaul of material and ditching and location of the work and things of that kind. Now I want to ask if those are not among the contingencies that you have previously testified about and for which an allowance was made under another heading.

A. No, sir.

Q. That is, were additional contingencies.

A. Those were additions to the straight cost of grading.

Q. Now, Mr. Hogeland testified that a very large part of this extra cost, as I remember his testimony, consisted of improvements and betterments made to the road since the contractor turned it over to the Company. Did you take into account that that was the fact?

A. What was that?

Q. That under this column of the page, cost per yard of the work, he included amounts that had been expended upon it since the road was turned over by the contractor to the Company.

A. No.

Q. In the way of betterments and improvements.

A. No.

Mr. HOLDEN: I must question the accuracy of that quotation from Mr. Hogeland's testimony; I disagree with it, I don't think he testified to that. These extra bills do not comprise subsequent work done on the road since the contractors got through with it; on the contrary, he testified they were a part of the cost of the work of construction.

Attorney General YOUNG: Well, we will have to refer to Mr. Hogeland's testimony, I think, on that.

Q. You didn't include in your version of the extra cost of the

grading any expenditure for permanent improvements or betterments after the road was turned over?

A. No, sir; all those items, my understanding is, close or should close with the closing of the construction accounts, no charges of that nature to be made after those accounts are closed.

Q. And before the road is turned over to the company for operation?

A. Well, practically at the time. There is never any set time when the road is turned over for operation.

Q. What I mean is that the items which you had in mind were the extra items of expense that would be necessary in the construction to fit the road for operation so that they would all have been incurred prior to the time it was turned over for operation.

A. Yes, sir.

Q. I think you stated that you didn't know whether the so-called constant employed by Mr. Hogeland was correct or not, but you did know that there was some amount that ought to be allowed for those extra expenses?

A. Yes, sir.

Q. Is that correct?

A. Yes, sir.

Q. And you didn't undertake to set any percentage of excess cost that ought to be added in any case?

A. No, I couldn't set a percentage, because that would be a fixed sum that would be impossible to adhere to.

Q. But in all these items of cost here to which you gave your approval, you understood them to be the cost at the present day; that is, the cost last year, and not the original cost?

A. Yes, sir.

Q. And you do know, do you not, that the cost as given here greatly exceeds what the work did actually cost the Company at the time it was done?

A. No, I don't know it.

Q. Well, you do know, do you not, that the cost of labor last year was very much higher than the cost of labor twenty or twenty-five years ago?

A. Naturally I suppose it was, although I don't know.

Q. Well, your experience as an engineer surely informed you of that, did it not? You have to cause work to be done of this kind, haven't you, frequently?

A. No, I paid for common labor twenty years ago I think as much as was paid here last year.

Q. Now, let me understand you. Do you want to testify, Mr. Stevens, that the labor cost of doing this kind of work was as much 20 years ago as it would have been last year?

A. I couldn't tell you as for that. There is one specific case that comes to my mind where I paid as much for common labor on construction work as probably was paid here last year.

Q. Well, you know that a specific instance wouldn't prove a rule?

A. No—either way.

Q. You know, regardless of specific instances, that the cost of labor is very much higher, do you not, both last year and now, than it was at the time the Great Northern was constructed?

A. Not in our part of the country; it is not.

Q. How about last year?

A. No.

Q. Well, what is your position on that question; do you want to testify it could be done as cheaply last year?

A. I don't think there is any material change in the price of labor now and ten years ago or fifteen years ago.

Q. Well, how about thirty years ago?

A. That is too far back for me to remember, General.

Q. Do you know when the larger part of the Great Northern road in this state was built?

A. Yes, I know it was a great many years ago, but as to what common labor was worth then I can't tell you.

Q. You don't know whether it is higher or lower?

A. No, sir.

Q. Well, you do know, do you not, both as an engineer and as an individual, that the Great Northern railroad did not cost any such amount in its construction as is given in this estimate of cost of reproduction by Mr. Hogeland?

A. No, sir; I don't know it.

Q. If the Company itself had reported frequently under oath to the proper state officers that the road had cost less than $30,000 a mile, and this estimate showed it to be worth something like $70,000, would that have any tendency to convince you that the estimate is higher than the actual cost?

A. I would not exprss an opinion.

Q. You wouldn't?

A. No.

Q. You wouldn't know whether the officers of the road who made that sworn return were telling the truth or Mr. Hogeland?

Mr. HOLDEN: I submit that is hardly a proper question.

Q. Now, you testified among other things, Mr. Stevens, on this cost of reproduction, as to what it would cost the Company to obtain the ties so as to reproduce the Great Northern in this state as it now is, and you stated, I believe, that Mr. Hogeland's estimate on that question was probably fair and near the truth?

A. Considering the road to be built in the next eight years?

Q. Considering the road to be built in the next eight years. There are about a million oak ties which would have to be reproduced, and Mr. Hogeland's estimate here of the cost of obtaining them is 85 cents a piece, and do you want to be understood as testifying that that is a fair estimate in your opinion of what it would cost to obtain them?

A. I want to be understood as saying that I don't think he could obtain them locally practically at any figure, therefore you would have to bring them from the outside, and if you did that, that would be a fair price.

Q. There has been no such price as that paid for ties in this state in the past, has there?

A. Not that I know of.

Q. How do you know that ties are not going down?

A. It is natural to believe that the law of supply and demand will continue in force. I know that the price of ties has been going up, at least I believe it has; I don't see any reason why the prices should go down.

Q. Well, it would be possible, would it not, to find some means of connecting and holding rails in palce for railroad purposes better than the wooden tie?

A. Possibly. In this case it would not be reproducing the road as it exists, though.

Q. Well, there are about a million ties in the road that are oak; when were they purchased?

A. I don't know that.

Q. Do you know what their condition is now?

A. No, sir.

Q. Well, your idea was to reproduce those ties, wasn't it, not to furnish new ones?

A. No, sir; to reproduce oak ties and put them in there.

Q. You were going to furnish new ones?

A. Yes, sir.

Q. The value of these ties depends upon their age, does it not?

A. Not as a going proposition. It doesn't as long as they are kept in repair and replaced.

Q. Well, you said that the average life of a tie was about eight years; the average life of an oak tie would be a little longer than that, wouldn't it?

A. Well, I assume eight years—eight or nine.

Q. Well, now, then, the Great Northern Railway is a going concern and has been for more than thirty years; if you were going to assume things it would be fair enough to assume, would

it not, that the oak ties it has in use were not all put in use in one year, they have been procured and used by the Company in the ordinary way, and therefore we would have to assume, wouldn't we, that they have been in use for some time and that they have been subject to some depreciation?

A. Undoubtedly.

Q. Did you make any allowance for that?

A. No, sir.

Q. Well, in order to know what it would cost to reproduce those oak ties that are in the Great Northern railroad it would have been necessary for you to know, would it not, just how old they were and what amount of depreciation should have been taken into acconut?

A. No, I don't think so.

Q. You were not proceeding on that sort of a theory?

A. No, sir.

Q. In other words, you were not intending to reproduce the road as it is now and to reproduce it new?

A. I was intending to figure on an estimate for reproducing it, but it would be utterly impossible to go out and buy a lot of second-hand ties that had been a half worn, or a third worn, or a tenth worn, consequently if you got any at all you would be obliged to buy new ties.

Q. That wouldn't be any more impossible than several other assumptions it is necessary to indulge in in order to follow out this line of reasoning?

A. Well, that is an impossibility that is clearly apparent.

Q. Is it any more impossible than to assume that the road isn't there?

A. I wouldn't want to answer that.

Q. But if you are going to follow this line of reproduction at all or this theory of reproduction, you must confine yourself, must you not, to reproducing the road as it is, not reproducing it in some other condition?

A. I would eliminate all the uncertain elements I could, General, and do the best I could. It would be an impossibility, of course, you know, to go and buy a million or any such number of second-hand ties.

Q. Don't you think it is an unfair proposition to attempt to saddle on the public as an assumed cost of reproduction not only the actual present market value of new ties, but an enhanced market value which you estimate would result from the demand for that many ties?

A. No, I don't think so.

Q. Why?

A. Because I think it would be my duty, if it were put in my hands to reproduce this road, to look ahead and figure reasonably what I must pay for those ties.

Q. But would you have to assume, among your various other assumptions, that the task of reproducing it would be committed to you right now, or wouldn't you have to assume that you were confronted with the duty of reproducing it at the same time when the company bought these ties and that you would have these ties on hand and would have bought them at the same price the Great Northern bought them for?

A. I don't think I can follow that question, it is pretty long.

Q. Well, now, suppose you had bought an equal number of oak ties at the same time and for the same price that the Great Northern purchased them for, you would then have on hand, would you not, ties substantially similar in condition and age to the ties that are employed by the Great Northern? What would it have cost you to have acquired those ties at that time?

A. At what time?

Q. At the time these ties were acquired.

A. I don't know; I couldn't tell you that. I am taking the situation as it exists at present or will be in the next eight years so far as ties are concerned.

Q. You are taking an imaginary condition for the next eight years?

A. No, I don't think it is imaginary at all.

Q. Well, you have said that ties have never cost the amount that Mr. Hogeland has put in here and which you have expressed your approval of?

A. Not to my knowledge in this country. I think I know of roads that are paying practically that now for oak ties.

Q. When you valued the New York, New Haven & Hartford, didn't you have to make an estimate there of the cost of some oak ties in the reproduction of that road?

A. Yes, sir.

Q. What price did you put them in at?

A. I think at the price we are paying. I think we are paying 80 to 85 cents. I have nothing to do with the purchase of ties there, but that is my impression.

Q. Now, didnt you put the oak ties in the New York, New Haven & Hartford estimate at 53 cents?

A. I don't recall whether I did or not. I am giving you the price of new ties.

Q. Do you say that you didn't?

A. No, I don't say that I did or did not.

Q. Your estimate for the New York, New Haven & Hartford railroad is just recently finished, isn't it?

A. Yes; still the figures on ties were made a year ago.

Q. This estimate is for a year ago, also, is it not,—at least it is for 1908?

A. Yes, sir, I think it is.

Q. Well, if you put in oak ties in your estimate of the New York, New Haven & Hartford railroad at 53 cents, then this estimate at 85 cents would certainly be excessive in your opinion, would it not?

A. I don't know that I put that estimate.

Q. Do you know that you didn't?

A. No, I don't know one way or the other.

Q. You would know if your report was placed before you?

A I probably would, yes.

Q. Well, I think I will have it before you before we are through with you. You also spoke about the cost of treating ties, of creosoting them and you said there was also a method of treatment known as the zinc and creosote treatment, I think; is that correct?

A. Yes, sir.

Q. Are any of the ties in the Great Northern roadbed creosoted?

A. I don't know whether any are or not. I don't think they are, but I couldn't say positively.

Q. This element of treating ties, then, ought not to be taken into account in estimating the cost of reproducing the Great Northern road?

A. I don't know about that. I didn't go into that enough to know.

Q. You have no knowledge as to whether any of them have been treated or not?

A. Not in this state, no.

Q. There was a letter of Mr. Hogeland shown to you from which you testified. I didn't see that letter. Have you got it, Mr. Holden?

Mr. HOLDEN: It has not gone in evidence yet.

Attorney General YOUNG: Is it proper we should see it in order to cross-examine this witness?

Mr. HOLDEN: Certainly (producing letter).

Attorney General YOUNG: I suppose, Mr. Holden, if this letter is to be used for any purpose it ought to go in evidence?

Mr. HOLDEN: I have no objection. I expected to refer to it when Mr. Hogeland goes upon the stand again.

Q. Did you consult this letter, which was shown you in your direct examination, as having been addressed by the purchasing agent of the Company to Mr. Hogeland before you expressed your approval of the prices given by Mr. Hogeland for ties on

the theory of reproducing the road?

A. I don't think that I did. I recall now seeing the letter before, but what it contained didn't make any impression on my mind, I didn't remember what there was in it.

Q. Well, by looking at it now and by consulting item 5 of Mr. Hogeland's Ex. 2 you will see that the prices paid by the Company during the last few years are very much below Mr. Hogeland's estimate of the cost of obtaining ties for reproduction?

A. Yes—that bears out what I said, the price of ties is advancing very rapidly.

Q. But they have not got within gun-shot yet of the prices furnished by Mr. Hogeland, have they according to that letter?

A. I should say yes; they are getting very close to them.

Q. Now, then, to explain that cost and method of acquiring oak ties as given by the purchasing agent, he gives here the average price of tamarack and cedar ties obtained for the Company during the period from 1904 to 1908—four years. (To Mr. Holden.) Have you any objection, Mr. Holden, to my having those prices read into the record in connection with Mr. Stevens' testimony?

Mr. HOLDEN: No, I have no objection. I think the whole letter should go in if part of it goes in. I will formally offer that letter as a part of Mr. Hogeland's testimony, with the statement that it will be further commented on and referred to when Mr. Hogeland resumes the stand, and with that offer counsel may use it and I think it might be read into the record. You referred, when Mr. Hogeland was on the stand, General Young, to a tie circular, and I was under the impression that it had been offered in evidence, but if it has not I desire to offer it as a part of this letter, making one entire exhibit, because the letter refers to the circular, and therefore the suggestion I make is that that letter and the tie circular referred to go in together as one of Mr. Hogeland's exhibits.

Attorney General YOUNG: The portion of the circular, your Honor, that had any bearing, was read into the record by Mr. Hogeland at the time he testified, that is, the prices that were being offered by the Company.

Mr. HOLDEN: I want the whole circular in.

The letter and circular referred to were here attached together and identified as "Complainant's Ex. 13—Hogeland," and considered in evidence.

Q. In speaking about the valuation of structures as given by Mr. Hogeland in his exhibits, if I remember right, you stated, Mr. Stevens, that assuming that the matters appearing upon that exhibit were taken from the records you would not question them because you believed the Great Northern records were correct.

A. I believe they are substantially correct, yes, sir.

Q. That included, so far as I understood your testimony, the estimate of the cost of reproduction as appearing upon the sheet relating to station buildings and fixtures and fences, cattle guards, signs and other structures of that kind?

A. Yes, sir.

Q. Well, did you understand in so testifying that the estimated cost of reproduction was taken from the Great Northern's books?

A. No, sir, I understood that those in general were records taken from similar classes of work.

Q. Speaking now of the structures of the class that I have referred to, being the station buildings and fixtures, water stations, coaling stations, fences, cattle guards, signs and other structures of that kind, you did not understand, did you, that the prices given were taken from the books?

A. Well, I understood they were taken from the books of doing that class of work and applied to those particular cases. It might not be that those individual cases would cost that much, but that class of work.

Q. I was going to inform you that Mr. Hogeland testified that in no case with reference to that class of properties did he give the cost from the books.

Mr. HOLDEN: You mean the original cost, do you?

Attorney General YOUNG: The cost from the books—I mean just what I say—that he took the books so far as they showed the quantities, and he took the records of the office so far as they showed plans and specifications as to buildings and structures, but that in all cases he applied the prices of last year to them.

WITNESS: That is my understanding.

Q. Well, now, you don't assume to say, do you, that you know what the prices of those materials last year were and have been ever since?

A. No, sir.

Q. And you didn't so intend to testify?

A. No, sir.

Q. So that, insofar as your testimony related to those exhibits, you intended only to say that you believed the quantities as given in the exhibits were correct?

A. I think I stated in my testimnoy that assuming Mr. Hogeland's figures as drawn from the records of the value of certain classes of material were correct the deductions would be correct.

Q. Well, if you understood that no part of the valuation was taken from the books, would you desire to change your testimony?

A. No, sir.

Q. Well, in that case you would have no notion as to their reasonableness, because you do not know what the prices were in this vicinity last year for the materials that entered into these structures?

A. Why, I know, generally speaking, but I can't tell you what the price of a brick would be and things of that sort.

Q. What you intended with reference to the matter was,

Mr. Stevens, to express your belief that so far as the books showed the matters that appeared upon the exhibit the exhibit was correct, was it?

A. Yes.

Q. You didn't attempt to corroborate Mr. Hogeland's testimony as to value in this vicinity last year?

A. I intended to corroborate that if he had a certain number of buildings to build or fences to build or stockyards to build, that assuming the quantities he had taken from his books for similar classes of work and similar buildings were correct, that with the price of labor as it undoubtedly is and as materials are and have been for a number of years, his estimate was just and right.

Q. Well, what knowledge did you have of the prices of materials that would be necessary in the construction of these structures last year in this vicinity?

A Why, I have known for years the comparative value and cost of materials all over the United States; I know from my experience about what it would cost to build a certain building—that is, I can figure it out.

Q. I thought you told me a little while ago you didn't know the difference between the labor cost now and 25 or 30 years ago?

A. Well, I don't; that is a long time back—25 or 30 years ago. I said I didn't think there was very much difference.

Q. What did I understand the purport of your testimony to be with reference to that class of subjects, then?

A. That the estimate looked reasonable for the amount of work that is shown, the size of the buildings and the location and all of that. I didn't undertake to specify as to details.

Q. And you didn't purchase during last year, nor for a great many years, any of that kind of material in this part of the United States?

A. Well, a great many years, yes.

Q. How many years?

A. I purchased three, or four, or five, or six years ago; four or five years ago.

Q. How long since you worked for the Great Northern road?

A. Six years.

Q. You have not been in this part of the country doing this kind of business since that time, have you?

A. I have been all over the West up to four years ago.

Q. You were in Panama a couple of years?

A. Our lines (the Rock Island's) extended into St. Paul, into Denever and into Texas, New Mexico and Arkansas. I probably had bought in the two years I was in Panama more material, more lumber, than any one man in the country, in the United States; it came from the United States.

Q. Well as a matter of fact, you assumed that Mr. Hogeland had applied last year's prices, didn't you?

A. Largely, yes.

Q. Without stopping to examine the exhibits to see whether he did or not?

A. I didn't go through the exhibits to see whether he did or not; I didn't go through his books at all.

Q. So that you don't know anything about it; you assume that he probably took the amounts from the books, and you assume that he probably applied last year's prices, as he stated?

A. I think it was stated here in the direct examination that I made no examination of the books of the quantities he took off—I assumed they were correct.

Q. And you made no examination of the prices, either, to see whether they were correct, but you assumed they were last year's prices?

A. Only in a general way, that is all.

Q. So that you wouldn't want to testify that they were last year's prices in fact?

A. Why, no, I wouldn't want to testify of my own knowledge, of course.

Q. If different prices had been used by Mr. Hogeland and had been inserted in his exhibits, you would have assumed, would you not, that they were last year's prices as claimed?

A. Unless there were some glaring discrepancies that the thing didn't look right, I undoubtedly would have.

Q. You were speaking about the contingencies that have been allowed for by Mr. Hogeland in this estimate of the cost of reproduction and you have stated, I believe in a general way, that you thought that his allowance for contingencies was justifiable, and you based that opinion, if I remember right, on the fact that the ordinary experience of an engineer is that there are a number of things overlooked in making an estimate of the cost of any particular line of work for a railroad, and that ordinarily there must be an allowance made for contingencies, to cover what you were pleased to call the ignorance of the profession, at least what ought to be called, perhaps, the incapacity of the profession to see into the future; but you stated, I believe, that there was no fixed percentage that ought to be allowed?

A. I said that opinions varied; but, as a rule, about ten to fifteen per cent is what is usually allowed, depending upon the sums or items that they cover.

Q. Well now, that percentage of allowance for contingencies arises from the uncertainties that you mentioned in your direct testimony pertaining to the work and from the unforeseen things that are met in construction, does it not?

A. To some extent yes.

Q. When you take the case of a constructed and finished railroad as to the actual construction of which everything has been reduced to a fact, and in the construction of which all of these contingencies that you have referred to have been met and covered and you have before you the actual cost of the finished road, including the contingencies, is it proper, in making an estimate of the reconstruction of a road of that kind, to allow the contingencies again?

A. I don't think you are allowing them again. In the first place, your contingencies are not all known.

Q. After you have paid them, aren't they ascertained and a matter of record?

A. No, sir.

Q. Why not?

A. Because no mortal man can foresee the weather; he can't foresee the labor market, he can't foresee strikes, he can't foresee fires, you may have had thirty of them in one year five years ago, you may not have any more for the next five years, you may have them every year.

Q. Your ten per cent covers that as an average proposition and includes all of those things that depend upon chance, does it not?

A. Yes, it is intended to.

Q. Well, now then, all those matters of chance and contingency and uncertainty were actually encountered, probably, in the construction of the road the reproduction of which you are considering, and having been encountered and having been paid, they have been converted from contingencies into certainties, have they not?

A. No, sir, I don't consider it so.

Q. Why not?

A. Why, you are proposing to build a road; the contingencies are all ahead of you, none of them are paid for.

Q. The same proposition confronted its promoters before the road was built, did it not?

A. Undoubtedly.

Q. Well, now, would you think it would be a fair and reasonable proposition to allow that same full amount for contingencies when you have before you all of the actual contingencies that were encountered and that were met and were paid for in the construction originally?

A. I don't understand you know anything about what was

paid for, this is a new proposition.

Q. Well, but you have set before you a finished thing, have you not?

A. Yes.

Q. And you have set before you, also, if you want to find out, just what it cost, have you not?

A. Yes, sir.

Q. Or ought to have.

A. What it would cost to reproduce it.

Q. And that includes not only the cost that was actually estimated but the additional cost that was encountered in the construction of the road?

A. No, sir, it is what you may encounter in the future in your building,—it is vastly different.

Q. Are you going to assume that you may encounter in the future something different from what was actually encountered in the past?

A. Yes.

Q. Why are you going to do that?

A. Because you can't control the elements, you can't control labor—

Q. You couldn't control them either at the time you built the road?

A. No, but you take the gambler's chance, you might have met them and you might not.

Q. Isn't that the very gambler's chance that requires this ten per cent average allowance to cover?

A. It is a chance that you are absolutely certain, from the result of experience on every railroad, every piece of work, that there are these extra things come up that you don't foresee that you must provide for as well as you can.

Q. Now, Mr. Stevens, suppose that this road was built according to your theoretical plan here or according to Mr. Hogeland's theoretical plan, and suppose it cost all of the things that

are estimated as constituting its probable cost, and suppose ten years from now you are called upon to make another estimate as to what it would cost to reproduce it, would you include the item of contingencies again?

A. Yes, sir.

Q. Suppose you were asked each year for ten successive years to estimate the cost of reproducing the road, would you at each time include—would you take the estimate that you last made and add to it again the contingencies?

A. I would add a certain proportion on my fixed quantities, what I regarded as fixed quantities, for contingencies.

Q. If you made your estimate often enough, then, you would have as much in the estimate for contingencies as the road actually cost in the first place?

A. Oh, no, I don't think so; that isn't mathematics at all.

Q. Well, is there very much that has to do with mathematics in this kind of an estimate?

A. Oh, yes.

Q. How can you apply mathematics to imaginary conditions?

A. Well, that is a question I wouldn't care to answer.

Q. Well, I would like to have you explain it if you say this is a matter of mathematics.

A. Multiplying a certain amount of yards by certain prices producing a certain result; that is mathematics.

Q. But the amount of yards is imaginary?

A. No, sir.

Q. And the price is imaginary?

A. No, sir.

Q. And the result is reality, is it?

(No answer.)

Q. Well, didn't you say this, in your direct testimony, that this was all a mere matter of imagination and speculation and had no practical value?

A. I said it wouldn't be to me. I am not the judge of the value, though.

Q. You are far above the average, Mr. Stevens, of men on questions of this kind, because of your vast experience and your knowledge of the questions involved, and if to you an estimate of this kind would have no meaning, what do you think it would have to the mind of an ordinary man?

A. I am simply called upon to give my judgment as to the cost of certain reproduction items which are given.

Q. And after it is all done, it means nothing to you?

A. Not to me, no. I have no use for it one way or the other.

Mr. O'BRIEN: Only to a man whose mind is "warped by the study of law," as Judge Mitchell said.

Attorney General YOUNG: It needs a man of some poetic instincts, who could live in the realm of imagination.

Adjourned until Monday morning, March 29, 1909.

Federal Building, St. Paul, Monday, March 29, 1909. The hearing was resumed at 10 o'clock A. M.

JOHN F. STEVENS,

recalled for further cross-examination, testified:

By Attorney General YOUNG:

Q. Now, Mr. Stevens, referring to Hogeland's Ex. 2, which you used in your testimony, it purports by its title to be an estimate of the cost of reproducing the Great Northern road as of June 30, 1908; what do you understand by that phrase, "as of June 30, 1908"?

A. Why, I would naturally assume that it would be based on the cost of labor and materials of that date; that is, that the inventory that he was taking would be based on the prices fixed at that time.

Q. In giving your testimony, Mr. Stevens, with reference to that exhibit, you took into account, did you not, the suggestion of Mr. Hogeland that instead of confining himself to the prices

as of June 30, 1908, he speculated as to the probable prices that he would have to pay during this theoretical eight years of construction, especially so as to ties and rail?

Mr. HOLDEN: I don't think he made any such suggestion as to rails, General.

A. Why, I don't know particularly what Mr. Hogeland said about it. I certainly, as I expressed myself, took into consideration on the question of ties that there would be a rise of timber during the next eight years.

Q. Well, that would be departing from June 30, 1908, then?

A. It certainly would.

Q. I think you testified to something of the same kind with reference to rail, that the increased demand would necessitate obtaining a part of the rail at some point other than Chicago, which I understand to be the general market for this part of the country.

A. I understand that is the general rule of the steel company, to distribute the orders around among the different mills.

Q. So that upon that subject you didn't take the prices as of June 30, 1908?

A. I think I did, yes, sir.

Q. Well, would it be possible in taking the prices as of June 30, 1908, to indulge in a speculation of that kind as to what proportion of the rail would have to be bought at some point other than the natural market for this locality?

A. I understood the prices that Mr. Hogeland gave on the rails that were bought actually by the road in 1908 was the money that they actually paid for the rails,—the figures he gave. As I understand it, the basing price is $28 of rails at Chicago or at Pittsburg, and the difference in cost of the Pittsburg rail and the Chicago rail here was simply the additional freight.

Q. Transportation. Well, the Chicago price is the price that controls the market here, is it not, ordinarily?

A. Provided you get your rails from Chicago, it is, yes.

Q. Well, under ordinary circumstances you can get them there, can't you?

A. That depends on what ordinary circumstances are. I presume a small order of rails you could get from there; a large order you could not. That is, that is my opinion—simply an opinion, General.

Q. Well, what I would like to get at is whether this estimate as of June 30, 1908, really means that or whether it means an estimate as of a time in the future when you would purchase the material in case it were necessary to purchase it.

A. I understand it to be an estimate based on 1908 prices.

Q. And I would like to know, too, whether the estimate contemplates a purchase under ordinary circumstances or under the extraordinary circumstances that would arise if the railroad were removed and it was necessary to immediately reproduce it.

A. I don't quite get the drift of that.

Question read.

A. Why, that is a pretty hard question to answer, because I don't know, and there don't anybody know until they actually try to carry out the program, as to whether you would buy 100,000 tons of rail one year, or 300,000 or 50,000; so that it might be considered an ordinary occasion or an extraordinary one; nothing but practically or actually going ahead and doing the work would develop. This much I am well satisfied in my own mind—although of course I may be wrong— if you had call for and bought any large amount of rails, or tried to, your order would be distributed, you couldn't get them all from the one place.

Q. If you were located so as to be supplied by the Chicago market, you would get them at the Chicago price, wouldn't you? That is, if you were located so as to be naturally entitled to be supplied from Chicago?

A. If I wanted to buy 100 000 tons of rails or any amount,

located here, at the lower freight rate from Chicago I would get them there if I could.

Q. Now will you state definitely whether in giving your testimony you actually confined your estimate of the cost to June 30, 1908, or whether you did not?

A. Generaly speaking, I did, with the exception of ties, as I explained Saturday, and I allowed something for the rise in the price of timber, which I think will come.

Q. Well, when you allow anything for the prospective future demand of an article, you can't be said to be giving its price some time in the past, can you?

A. No, sir.

Q. Do you know whether Mr. Hogeland, in the other items of the quantity that would be necessary for the construction of this road took into account this possible increased demand that would arise from the necessity for having all of that material, or whether he actually confined himself to the prevailing ordinary prices of June 30, 1908?

A. I understand he confined himself to the prices of 1908.

Q. But do you know?

A. Why, as far as possible to know anything, I am well satisfied that he did, yes.

Q. I think you stated Saturday that you made no personal examination of the prices so as to satisfy you or qualify you to testify as of your own knowledge?

A. Well, I believe that he did.

Q. Well, it is simply a matter of belief, then, is it?

A. Yes, sir.

Q. And the reason why you believe it, is because you think well of Mr. Hogeland, is it?

A. Partly, and from the result that he obtained.

Q. And your good opinion of him would induce you to believe any other figures that he produced?

A. No, sir—nor no other man.

Q. You stated, I think, with reference to Mr. Hogeland's plan as outlined by his map Ex. 1 and the estimates contained in his Ex. 2, that you were not able to say whether it was the best or worst plan that could be devised, but that in your opinion the road could be reproduced by following that plan. That could be said, could it not, of a variety of other plans?

A. Certainly.

Q. There could be a plan devised, could there not, for the reproduction of the Great Northern Railway system in this state, in a good deal less time than eight years?

A. Oh, I presume so.

Q. Now, in a conjectural estimate like Mr. Hogeland's of the cost of reproduction of a railroad already in existence, the more time you allow for reconstruction the larger the estimate will be, on account of the interest during the construction period, salaries of officers, and things of that kind?

A. Why, certainly those fixed charges would run against it all the time.

Q. So that if you were to assume the reproduction of the road in one year, you would eliminate a very large amount of Mr. Hogeland's testimony?

A. Well, I wouldn't say as to that.

Q. Do you know that his allowance for interest alone amounted to about $25,000,000?

A. Yes, sir.

Q. Well, if you assumed a plan under which the road could be reproduced in one year, about seven-eighths of that interest could be eliminated, couldn't it?

A. Probably a great deal of interest could be eliminated. It would be largely offset by the increased cost of other items.

Q. The amount allowed in Mr. Hogeland's testimony for interest alone, during the period of reproduction, would in fact have paid for the construction of about a thousand miles of this road, with its equipment and terminal facilities at the time it

was built, wouldn't it?

A. I know nothing whatever about that.

Q. Your experience in railroad work has extended back over a considerable number of years, Mr. Stevens and has also been in various parts of the country, has it not?

A. Yes, sir.

Q. Could you state, in a general way, the comparative difference in cost of constructing a railroad now and say ten years ago?

A. No, I don't think I could without giving some thought to it or making a few figures on it.

Q. Well, I am not asking for accurate figures, but in a general way, approximately.

A. Much material that goes into a railway is now higher and costs more than it did ten years ago.

Q. About how much, in a general way, Mr. Stevens?

A. Well, that is what I wouldn't want to say, General, without making an analysis. That is a pretty difficult thing to do.

Q. Well, does it cost 25 per cent more now to build a railroad than it did ten years ago?

A. Well, material undoubtedly costs that, with the exception of rail, possibly. I don't remember the prices of rail.

Q. The methods of construction have greatly improved during that time have they not?

A. The methods of construction have somewhat changed.

Q. And more of the work of construction is done by machinery, is it not?

A. To a certain extent, yes.

Q. That cheapens construction, doesn't it?

A. Not always.

Q. What advantage is there in the employment of machinery instead of hand-labor, then, in the construction of a railroad?

A. Well, sometimes the hand-labor is not always available.

Q. But the tendency, Mr. Stevens, of the application of

machinery to doing the work of railroad construction is just the same as the tendency of such application in all other lines of industry, isn't it?

A. Yes, sir, I think it is.

Q. It permits the doing of the work a great deal more rapidly and therefore reduces its cost?

A. Not altogether, no.

Q. Hasn't it been true in the entire industrial world ever since the invention of steam engines?

A. Why, of course the introduction of improved machinery from year to year has hastened—we can do things quicker than we used to; we don't always do them cheaper, that I know of.

Q. What is the rule, does it cost more or cost less?

A. I wouldn't want to say that there was any general rule. Probably in a certain line of manufactures, for instance boots and shoes and things like that, you can make them cheaper—although I think they probably cost the consumer as much.

Q. You certainly know, do you not, that to do the grading and to make the cuts that are necessary in the construction of a railroad by a steam shovel is cheaper than to have it done by hand?

A. Probably in most cases it is, yes.

Q. The process of track laying by track-laying machines is cheaper than to have the track laid by hand?

A. No, I don't know that it is.

Q. Well, do you want to say that it is not?

A. No, sir; it differs altogether with the kind of country you are working in.

Q. It certainly enables you to do the work a great deal more rapidly?

A. No, you can lay track faster, where the country will admit of it, by hand labor than you can with machines.

Q. Well, eliminating that one feature of track laying, the general tendency of doing railroad construction by machinery

enables you to do it more rapidly?

A. Yes, sir, I think that is probably true.

Q. Well, now, I would like to have you express your opinion as to whether it costs more to construct a railroad now than it did ten years ago.

A. I think probably, taking into account the advance in price of most classes of material, it costs more.

Q. How would it compare with the cost of construction twenty years ago?

A. Well, I don't remember. I can't go back and figure the price of material and carry it in my head from twenty years ago.

Q. You were working at railroad work twenty years ago, were you not?

A. Yes, sir.

Q. Well, you knew, in a general way, about what it cost per mile to construct a railroad through a country like Minnesota twenty years ago, didn't you?

A. It would depend on what mile it is. There is all the difference in the world between miles.

Q. Well, is there a difference in the cost of each mile, are there any two miles alike?

A. Oh, there are many miles, many two miles very nearly alike, that are practically the same. On the other hand, there are a great many miles that are very different in cost.

Q. Well, the main railroad mileage in Minnesota is built over a comparatively level agricultural state, with no mountains and no deep valleys and nothing about the topography of the state to distinguish it from an ordinary agricultural country; the construction of a railroad in Minnesota, Iowa, the Dakotas and Wisconsin, would be about the same, wouldn't it, as an ordinary proposition, leaving out the Iron Range?

A. There ought not to be any great difference. no.

Q. Well, now then, do you want to testify that you don't

know, in a general way, about what it cost twenty years ago to construct an ordinary railroad per mile through an ordinary country such as we have here?

A. Do you mean as compared with now?

Q. Yes.

A. As I say, I suppose that in the course of ten years, with the rising prices of certain classes of materials, it would probably cost more.

Q. Some of the material went down, too, didn't it?

A. Went down?

Q. In the last twenty years; I mean the price lowered.

A. It is possible, although I don't happen to recall any now.

Q. Well, rails, for instance?

A. I don't remember what rails were twenty years ago.

Q. Well, I would like to have you give us your opinion—and I don't want to harrass you by repeating the question—as to whether the cost is more, or would have been more in 1908 than in 1898 to construct the Great Northern Railway system in this state.

A. Why, I would be inclined, as a matter of opinion, to say that it would be more.

Q. Very much more?

A. Well, I wouldn't say as to that without figuring over carefully the details and getting statistics.

Q. Would it be as much as ten per cent, in your opinion?

A. Well, I wouldn't want to venture any opinion on the percentage.

Q. Well, do you know whether it would be 10 per cent or 25 per cent?

A. No, sir, I do not.

Q. How do you come to not know?

A. How do I come to not remember a great many things?

Q. You should be a "walking encyclopedia" about the valuation of railroads.

A. I am not. I don't profess to be.

Q. What in your opinion is the difference or would have been the difference between the cost in 1908 and the time when the road was actually constructed?

A. Well, the time that the road was actually constructed, as I understand, extended over a great many years. I understand some of it was constructed as late as 1908 and 1904 and 1905 and 1906 and 1907. It was practically under construction for a great many years; so that it would be necessary, in order to answer that question, to sit down and take every year by itself and figure the general average. I couldn't say.

Q. Well, the ordinary mortal does not get down to exact figures, and for the purposes of common knowledge we want to know, in a general way. While you engineers always get down to figures we ordinary mortals reason more loosely than that. Now would it cost very much more to have constructed the road in 1908 than at the time it was constructed?

A. I think, as I say, it would cost more, but how much I am not prepared to state or to even express an opinion.

Q. Now, assuming that the road had its right-of-way and terminals, so far as the real estate rights are concerned, and eliminating from the problem the contingencies that have been included in Mr. Hogeland's estimate, and the interest which he has allowed during the speculative period of construction, and assuming that if the road were obliterated it could be instantaneously reproduced, would it have cost ten per cent more to have reproduced it in 1908 than it did at the time it was built?

A. I have not got a brain that is competent to consider the system of the Great Nortern railway in Minnesota instantaneously reproduced, so I couldn't answer it, General.

Q. Well, have you a brain capable of comprehending that it could be—

Mr. O'BRIEN: Instantaneously obliterated—ask him that.

Q. I was going to ask you if you had a brain that was capable

of comprehending that it could be instantaneously obliterated.

A. No, sir, I have not.

Q. You could give an opinion, could you not, on the relative cost of the material that it would be necessary to use in the construction of the road in 1908 and at the time that it was constructed?

A. Oh, my general impression and opinion is that it would cost more.

Q. And so far as the work of constructing the grades and making the cuts necessary to construct the road, would that cost more or less?

A. Well, General, I wouldn't want to even venture an opinion on that without a chance to study it. If, as I understand it, your theory is this, that to reproduce the road in one year—in the year 1908, based on 1908 prices—I should say, first, that it would be an impossibility, and, second, eliminating the impossibility part of it that the cost would be tremendously increased.

By Mr. O'BRIEN:

Q. Can't you eliminate the question of reproducing the road in one year, or in nine years, or in eight years, or at all, Mr. Stevens, and simply compare the prices paid for the construction of the road when it was constructed, and the prices which would be paid for the construction of the road now, and eliminate everything else?

A. No, sir, I have no more idea what was paid for construction of the Great Northern road years ago than you have; perhaps not as much.

Q. You can compare the going prices and the going cost of the road honestly built at the time the Great Northern was built?

A. No, sir.

Q. In a general way, can't you do that?

A. I wouldn't want to, no, sir.

Q. You could by examining the problem?

A. Oh, if I had access to all the records and go back and take weeks or months to go into every detail, I might.

Q. Yes, sir, you could by use of the records and by an examination of present prices absolutely determine the difference in the cost of that road when it was constructed and what it would cost to construct it today?

A. I presume an engineer could make a comparative estimate.

Q. And that estimate would be much more accurate and close and truthful than the imaginary estimate upon the theory of reproducing the road in eight years as we have been talking about?

A. No, sir, I don't understand it so.

Q. Well, at least, it wouldn't be imaginary?

A. Well, I think you probably misunderstood me or my opinion, at least, of the value of the reproducement cost as expressed in these figures or any figures. I ventured the suggestion and the opinion—my opinion was that such figures were valueless as representing the value of a railway, and I still think so; because (if you want me to tell why) that they do not go far enough. They only cover certain elements of the cost of a railway or the value of a railway. They omit many of the most important elements entering into the value of a railway. Therefore, accepting an inventory (which is a better term to my mind than replacement estimate) accepting those figures leads you to a fallacy, because it is based on a fallacy; you are not getting all the elements that enter into the value of a railway property, whether it is the Great Northern or any other. There are other elements that you omit (that we omit or somebody omits) that enhance the value of a railway that are not mentioned, and are not taken into account at all.

By Attorney General YOUNG:

Q. What other elements do you refer to? Speculative elements?

A. Well, there are many—What called?

Q. Speculative elements.

A. No, I don't call them speculative; they are inherent in, I think, every railway property, and while it is very hard to put them in exact dollars and cents, they exist, they are there just the same, and they affect the value of the property.

Q. Now, it is possible, is it not, to go out and take an inventory of railway property in just the same way that you take an inventory of other property?

A. Well, I understand that is practically what has been done in this case.

Q. You can go out, can you not, and find out the amount of land used for right-of-way and terminals; you can find out the amount of materials that were used in your structures; you can find out the yardage of the earth and different materials that were moved, and the cuts and yardage of different kinds of material that were used in constructing the grades; you can apply current prices to all of those things, can you not?

A. Yes, sir, practically.

Q. And in that way you can tell in just the same way that you tell of other property the present value?

A. No, sir.

Q. Well, when you inventory property generally, Mr. Stevens, when you ascertain its current market value, you don't enhance that value, do you, by allowing for interest during the period of manufacture?

A. You take an inventory of the visible or physical possessions of a corporation or a firm, and apply the current market prices to those individual objects that constitute their possessions; you get a certain figure that may or may not represent the value of the property of that corporation or that firm or that individual; it certainly does not, in the case of a railway at all; that is why I say, and said last Saturday, that I don't consider any statement, made up as these are, of any value un-

less it is supplemented by the addition of the rest of the values.

Q. When you have ascertained the current market value of the physical property of any concern and you have made due allowance for depreciation, if there should be depreciation allowed, you have got to a point where you can give its physical value, haven't you?

A. You probably can come as near in the case of a railway as is practicable to giving the going values of the different elements up to that point.

Q. Yes. Well, now, you spoke about the difference between railroad property and other property; the chief difference between railroad property and other property, Mr. Stevens, lies in the fact that a railroad devotes its property to a public use in operating a public highway, and therefore its property sustains a different relation to the public from the property of any other industrial concern, does it not?

A. Why, a railway is a public utility; there is no question about that.

Q. And when you speak about the distinction between railroad property and other property, it is true, is it not, that the public has a right to regulate the earnings of a railroad?

A. You are getting into a domain now that I don't feel qualified to follow you or express any opinion.

Q. Well, this is only a preliminary question; I am going to ask you another. You do know that is a fact, don't you?

A. I have no answer to make.

Q. You think the public have no such right, do you?

Mr. HOLDEN: Oh, well!

Q. You do know, do you not, Mr. Stevens, as a railroad man, that nearly every state has a law prohibiting the issuance of fictitious or "watered" securities of a railroad company?

A. I have made no study of the laws of any of the states, General.

Q. Well, you don't need to make a study of the laws to

know that; you do know that, don't you, as a man, outside of your character as an engineer?

A. No, sir, I do not know it.

Q. The reason why the public prohibit the issuance of watered stocks of railway companies is to prevent the creation of a fictitious basis upon which to compute an income, is it not?

A. Well, if you are giving that to me as information it is very interesting, but I know nothing about it.

Q. Well, it is time you knew it, you are getting along in life where you ought to know that.

A. I know—

Q. But you gave me a lot of information; you will pardon me for giving you a little.

A. Whenever I get a chance, General, I will sit down and study up some of these things—I will perhaps study law.

Q. It will pay you—it is a splendid study. Now, Mr. Stevens, if that practice is justifiable, this method of estimating the value of a railroad is wholly unjustifiable, isn't it?

A. What practice?

Q. The practice of giving pretended fictitious value to it which in the imagination of the man making the figures would arise if the railroad was obliterated and had to be restored.

A. I don't follow you that way.

Q. Isn't that the kind of an estimate we have before us?

A. I think the estimate you have before you is an inventory of the physical parts of the railway as it existed at the time it was presumed to be made. As I say, there are other values of a railway that are not brought out in the exhibits. Therefore, the statement that that is the value of the railway is, to my mind absolutely true, and that is the reason I made the statement the other day that to me it would be valueless; that is, valueless unless supplemented with the values that I think properly belong to it.

Q. Oh, you have changed your position on that since Satur-

day, have you?

A. No, sir.

Q. You stated Saturday that this estimate was a mere curiosity, would amount to nothing to anybody.

A. As it stops, yes.

Q. Well, you have added now to it "where it stops." You have added because it stops there with the railroad.

A. That is the reason, yes.

Q. It is not enough? How does the alleged cost of reproduction, as it appears in these exhibits, compare with the original investment, if you know?

A. I know nothing about the original investment.

Q. Well now, you stated, I think, Saturday, that the whole theory followed in this scheme of reproduction was an impossibility, and consisted of conjecture and imagination, did you not?

A. I don't think I did, no, sir.

Q. Do you want to change the statement you made Saturday with reference to your opinion of this kind of a proceeding?

A. I don't think I made any expression as to my opinion of this kind. I said that the results were false and misleading and were worthless, and they would be unless they are supplemented by the truth, the truth added to them so as to make a complete whole.

Q. You stated that so far as your road was concerned the money that it had spent in making this kind of an estimate was, in your opinion, thrown away, did you not?

A. I don't remember.

Mr. HOLDEN: Well now, if your Honor please, I object to General Young putting into the record so widely different statements from what the record shows the witness said. Now, I don't remember any such language as embraced in this last question.

The MASTER: We have the record here.

Attorney General YOUNG: I don't think it will hurt Mr.

Stevens' testimony at all; if he didn't say it, it isn't there, and my assumption is wrong.

Q. On page 490 of the transcript of your testimony given on Saturday, in your direct examination you said this, relating to this method of making an estimate of the cost of reproduction: "A. I think it is perfectly worthless, any valuation of a railway, for any purpose whatever, excepting as a matter of curiosity to the stockholders or directors, if they want to know what it would cost to put it back again; I regard it as curiosity, pure and simple, when I get through with it."

A. Well, as I say (I do yet) unless you are figu[illegible]g on the value of a railway cost you are not covering the value of a railway.

Q. What do you want to add to that, after meditating on it since Saturday, either as to the opinion of the plan, or as to the value?

A. There are many things that in my opinion should be added that would affect the value of a railway. First, there is the age of a railway.

Mr. O'BRIEN: That is for reverence?

WITNESS: What is that?

Mr. O'BRIEN: That is for reverence.

WITNESS: Reference?

Mr. O'BRIEN: For reverence, I say.

WITNESS: Oh, no; it is a well-known fact, that I don't think can be successfully disputed, that within certain limits the older a railway is (particularly its grade) the better it is. The effect of time on the cuts and banks is such as to make them more valuable, and a new railway when completed, with any reasonable amount of money you can spend on it, you can't do what time will do. Therefore, a railway that has been built, five, ten, twenty years or even up to fifty years, is more valuable, other things being equal, than a new railway. I don't know that I need to go on and elaborate what I mean by that, but I mean

that the banks settle to their final position; the material that is put on the banks in the shape of ballast, a large quantity of it becomes incorporated with the bank, solidifies the bank, makes it a better instrument for carrying heavy trains and supporting the track. The same is true of the cuts; the cuts wash down, the loose boulders get dislodged and are taken away, and a thousand and one things of that nature that make the value of a road-bed of an old road very much superior and increase the value over that of a new road.

Q. It reduces the cost of operation and of maintenance?

A. Well, probably it does. Probably it does. You understand that I don't arrogate to say, General, to anybody, and certainly I wouldn't mean to put these vaules in money that I am talking about, but they are there just the same. Now, there is another value which is quite important, and that is what might be called the franchise value of a railway. I understand, of course, without knowing much about the railroad law, that the state laws give the railroad a right to build a road, give them a right of what is called eminent domain, but at the same time I understand that most of the cities and towns of the United States still have certain powers over the regulation of their streets and highways and alleys.

Q. Do you think that applies to commercial railroads?

A. Do I?

Q. Yes, the power of eminent domain.

A. What is that?

Q. Do you think that that rule applies to commercial railroads, the power of eminent domain?

A. I think this: that while the power of eminent domain (I may be wrong now, I am getting into law) gives you the power to build a railway between certain points, and you can pass through certain towns and exercise that power, at the same time these cities and towns that you pass through still have the right of control over their streets as to the manner in which that railway shall be built.

Q. You don't understand, do you, that a commercial railroad has got to get the consent of a municipality before it can build through it?

A. No, I don't suppose they have.

Q. What do you mean by franchise,—the privilege granted by the state to build the road?

A. I do not; I mean this: that if any railway sought to come into St. Paul today or to go through Minneapolis to get in, for instance, and put its freight house where the Great Northern is, down here at the foot of Third street, it would have to cross certain streets and alleys, undoubtedly, in the city of St. Paul. Now, while we talk about building the road and reproducing it and building it as it is now, and figure the cost, it is altogether problematical in my mind and one of the uncertain elements whether the Great Northern or any other road could get in there at all.

Q. What has that got to do with the question of reproducing the road as it now stands?

A. It has got this to do: it leaves an element of doubt whether you will do your freight business down on Third street, in the center of the jobbing business, or whether you will do it out at Snelling avenue.

Q. In this element of reproduction, don't you have to assume that you have the right to come in there, or do you cut that out?

A. Why, we assume that they have come in here, but at the same time you cross certain streets. Now, these streets are taken care of by overhead or undercrossings, all of which are, as I understand, governed by one general ordinance or handled as special cases. Now, with the railway once there on the ground, they are in a very much stronger position in dealing with any city than they are if they are coming in; and in that way, to my mind, there is a great deal of value in what I would call the franchise value in those cities.

Q. The fact that they are there?

A. "A bird in hand is always worth more than a bird in the bush."

Q. You think, therefore, it would be a dangerous proposition to eliminate the road and start to build it again?

A. You know what I think about that.

Q. Do you think of anything else?

A. Yes, I do. I think there is a value one railway compared with another, in the management of the same. I believe that through a long series of years the successful management of a railway, giving the public good service, making it as sure as anything human can be that when you start you are going to get somewhere, and your freight will all get through, and dealing fairly and squarely with the public, and all that, is certainly an asset, in the shape of good will. I think two railways, if you can imagine it, starting on equal bases, one of them handled in what we call a first-class manner, doing its duty toward the public, showing a business-like ability all the way through as a public carrier; the other making a botch of it, as we may say, that the one railway (the first) with that management and that record is worth far more than the other. I think it is a business asset.

Q. Well, do I understand you to say that there should be rates allowed on the reputation of the man who built the road?

A. I am saying nothing about rates; I am trying to get in and tell you what in my opinion constitutes the elements which go to make up the true value of a railway.

Q. Is there anything else?

A. Yes, I think there is. The financial end of it, that goes a long way towards establishing the value of a railway. I mean by that that if the financial affairs of a railway have been conducted along business lines, that if the securities of the railway haven't been used for kicking around Wall street for stock-jobbing purposes, and the railway wrecked several times and rehabilitated, or partially so, if nothing of that kind has happened,

that it places the owners of that railway in a much stronger position in the money markets of the world. There are times (they have already come, and they are coming yet, just as sure as anything human can be) when these railways have got to raise millions and millions of dollars to take care of the business as we have seen it and as I feel very sure we will see it, (for I have lots of faith in the United States, I think we all have) and those railways which have not conducted their financial affairs in the past so as to secure the confidence and keep the confidence of the people who have money to loan, I don't care whether it is in New York, in the United States, Paris, Berlin, London, or anywhere else, will be in a much stronger position to obtain money and can obtain it when the other class of people cannot. Now, I regard—perhaps I am going too much into detail—

Q. We want to get the list of your elements of value. Of course, these are not engineering matters, I understood you to say all you knew about was engineering, but we would like to hear you.

A. No, I don't know as I said that.

Q. You said you didn't know anything about the laws of railroads or financing of them.

A. Well, I can give you some of my ideas.

Mr. O'BRIEN: It is very interesting, anyway.

Q. Well, go on.

A. Now, I think with a good financially strong railway system, that system is the greatest bulwark to the financial safety and power of any section of country that it is possible to conceive. I think it is much stronger, a better support to the country, more advantage to the country—I mean when I talk about the country the commercial conditions right through the country from laboring men and farmers to professional men—than a string of successful banks would be. I think that a poorly financed railway, a railway that is constantly in trouble

for money, that isn't able to make improvements—there can be no greater curse to the country that it serves. I have in mind now (I don't think I should call names) a certain railway running out of New York that very many years ago went into the hands of people whom I would call unscrupulous railway manipulators, their stocks were thrown around, used for stock-jobbing and everything else; their obligations were piled up until at the present time they are suffering; they can't raise money at any reasonable prices; they can't and haven't improved their road as they should. During the so-called panic, that commenced a year ago last October, I think, I don't know, but I believe that the reason why that road didn't go into the hands of a receiver was because the men who had the financial interests of the country at heart didn't dare to let it go. Now, it is a fact and can be easily proven by a study around New York City that there are many railways General, that run out of there, suburban property along the line of that road, ten to fifteen or twenty miles out is worth less, very much less, and has made the smallest raise in values during all the period that that road has run out of the city than on any other line, simply because the road has been poor and badly handled, badly financed, hasn't made the additions they should,either to the rolling stock or to its road, hasn't been able to give the public good service. Now, I think when you compare the result of a road like that with a system that has been well financed, has given good service, and the name of the roads or road is a tower of strength in the financial world, I think they have got an asset that, when it comes to the time when they have to raise money—and this country can't be developed unless the railroads are developed (I don't speak about any particular railroad, but the railroads as a whole) the money has got to come from the investing public, that the railway that is in that position with the confidence of the investing public, has got an asset that is invaluable; in other words, they have got one

that is the difference between success and ruin. Now, I regard a railroad—now, I am on the subject, my ideas may be peculiar—

Q. No, we have heard this before—

A. I am not laying them down—

Q. —this is familiar to us.

A. —as an axiom; but a railroad, in my mind, is in a sort of a dual position. It is a commercial enterprise; it is a manufacturer, and it is a merchant. As a manufacturer it manufactures only one product, generally speaking, that it derives its income from, and that is transportation; and naturally, it must have the best tool it can get to make goods that the public want, (and the public have got to have pretty nearly what they want, and they are entitled to it if they are willing to pay for it) they make this transportation and they sell it; the better fitted they are to make it, the better fitted they are to sell it and the better product they will be able to offer the public.

Q. Would it interfere with your statement if I ask you a question? What do you mean by a railroad making transportation? It furnishes facilities for carrying goods and merchandise.

A. Well, you can put it in any way you are a mind to, but they are manufacturers of transportation.

Q. It doesn't transport its own property but the property of others?

A. No, I understand that. It establishes the means and methods whereby they can be transported; that is what I mean. Now, there are other factors that enter into the relative value of railroads. An old established railway, if properly managed, properly handled for years past, has established trade connections, traffic connections you might say—I don't mean written formal traffic contracts or anything like that—but they have established intimate relations with the business communities of the country and they are known. If a man in Georgia has got

a shipment he wants to make to California, and there are two railroads over which somewhere between the points of shipment and receipt (if there are two railroads there) one that he has done business over for years that has given him good service, he knows the people, he knows that unless some extraordinary accident or act of God occurs his shipment will be properly taken care of, he knows they are good railroad men, good business men; other things being equal (as they probably would be in the matter of rates) he will select that man, select his road as against a new road that is just completed with its unknown factors both in the shape of a permanent road-bed, and particularly in management. Now, that is only one concrete illustration that runs through all railroading and all railroads. That is where the personnel of the business ability of the different managements come in very largely. And all these things are things that I can't and wouldn't undertake to put into a percentage in money or anything of the kind, but they do come in. and to my mind are important enough, so that with your inventory, as we call it, of reproduction, or whatever you choose (I think inventory is the better word on the whole) you must consider these additional factors in estimating the value of the railway to the country that it serves or to the stockholders or anyone else; they are factors that you cannot ignore. Therefore, while we can go ahead theoretically, taking the quantities and applying current prices to them, when we get through we haven't got all that a railway is entitled to in considering its value.

Q. If you were buying a road, Mr. Stevens, would you take into account all those things?

A. I certainly should. There is another value, while I am on it—

Q. Suppose you couldn't supplant the men that you were buying out?

A. What is that?

Q. Suppose you couldn't supplant the men you were buying out, suppose you didn't have all this ability and this wisdom that has characterized the management of the road, do you think you could buy it by buying the road?

A. That would be a question that I couldn't tell till I tried. I couldn't give an answer. There is another value, too, that occurs to me. You would probably—well, I won't say what you would do, some might call it speculative, but to me it is just as legitimate as any value. Now, I may ramble, but I will start by an illustration if you will permit me. There are certain sections of the United States that have been given over for many years, largely to manufacturing. The country is not agricultural and never was, and, practically outside of educating people, its chief industry is manufacturing. I was born and raised in that country and lived there for twenty-one years before I commenced my career. I know it very well. Now, I don't care to belittle any country, but I just offer these suggestions. As the country has grown west and south, manufactures have sprung up; in St. Louis, Kansas City and St. Paul and Minneapolis, all through the west and particularly in the south, in cotton manufactures. They have sprung up because they are nearer where the raw material is produced and where the food is raised largely that supports the operatives, and with the natural increase of populaton the operatives have appeared also. Then they are nearer the markets where the manufactured goods are used. Now, the natural, inevitable result has been this: that the cotton manufacturer has gone south where the cotton is raised; the manufacturer of boots and shoes has gone west, (St. Louis today, I think, makes more shoes than any city in the world; it wasn't so a few years ago); the manufacturer of steel of machinery and small things made of steel and iron, has gone west; the manufacturer of copper and brass goods is coming west; and I want to tell you today that there is no graver question I think that confronts any section

of the United States as to what is going to be the status of affairs, in twenty-five years from now, or less, in the section of country I have in mind. And that brings us directly to what is going to be the value of the railways there. The value of a railway is closely allied with the value of the country; there is no question about that; and if a country is poor and doesn't progress, the railroad doesn't progress; it can't. On the contrary, if a country grows, increases in wealth, power and importance, if traffic increases and business increases, the rail way does the same thing. Now, we come to the West; what do we find? We find, particularly in the Northwest, an altogether different condition exists than in the section I have been describing. We find that for the last forty years—well, I won't go back that far—but I know from my personal knowledge since 1874 (thirty-five years ago) that the country not only in Minnesota but clear through to Puget Sound, through Nebraska, has been on the up-grade ever since. I don't know that any part of the world ever has progressed as this part of the world has, and my opinion (and I am fairly well acquainted with the West) is that we are only on the beginning. In other words, that all through the West and Southwest the country is going to expand for years and years to come. It can have no great competitor in the West, no great rival, because we are, especially with our improved methods of transportation, practically at the Pacific ocean, we stop there, and any immigration that is going to affect us here is more likely to be a reflex from immigration that strikes the Pacific coast and is forced back on us here, increasing our wealth and importance, than we are to suffer from competition. The natural consequence will be that the value of a railway operating through such a country is bound to grow and increase in importance and wealth; it has a very different future before it as a commercial possibility, and therefore a very much greater latent value (you can call it speculative, or anything else you

like, it is a value,) than a railroad situated in the other section of the country that I described before.

Q. Is that all?

A. I think that is all at present. I would have quit before if you had told me.

Q. Well, we wanted to hear you. It is very interesting; it doesn't have much bearing on the cost of reproduction, but then it is interesting. Of course, those things you have been discussing in your statement just finished are not problems of engineering with reference to railroad construction; those are your views as a citizen of the prospects of the future for the West?

A. They cover certain values that I think should be added to the values of an inventory, in order to properly appreciate what a railroad property is worth.

Q. Well, it isn't any part of the province of a railroad engineer to capitalize the capacity of the owners of a road, is it?

A. What is that?

Q. It isn't any part of the duties of a railroad engineer to undertake to capitalize the managerial ability of those who are in charge of a road?

A. Well, an engineer or any man that is asked the value of a railroad, if he can give the different items that go to make it up, I think he is certainly entitled to.

Q. Well, will you answer the question?

A. What is the question?

Last question read.

A. No, I don't know that it is.

Q. Neither is it any part of his duty to speculate on the probability of the growth of population or the incerase of business in the future?

A. Well, I think he is clearly entitled to his opinion; if it is his opinion that it increases the value of a railway, he is entitled to say so.

Q. But is that engineering work, to speculate on those subjects?

A. I don't know but it is; I don't know as it is, I wouldn't say.

Q. A railroad engineer has to deal with certainties and not conjectures, hasn't he?

A. Very largely.

Q. He doesn't get his salary for prophesying?

A. Well, I wouldn't answer that question.

Q. Is it any legitimate part of the work of a railroad engineer to spend his time speculating on what the effect might be, for instance, on the labor market of a certain demand for a large number of men that he didn't intend to employ, or the effect upon the material market of the immediate demand for a large amount of material that he doesn't intend to buy?

A. I suppose that it would hardly be possible for a man, engineer or otherwise, to have his mind provided with a time-lock until he got through driving a stake or setting a transit that he could lock it up and his mind become a blank until he unlocked it the next day.

Q. Is the kind of work I have referred to the kind of work that an engineer is paid for by the Company?

A. I don't know what the people who pay for it think about it; they are the people to answer the question.

Q. Does the Company pay him to furnish his opinion on those subjects as to the cost of such labor and material if they were not necessary to construct a road which is already in existence?

A. Well, that is a question I wouldn't want to answer.

Mr. HOLDEN: These gentlemen asked Mr. Stevens to express his opinion on these additional elements of value; he didn't volunteer; and now as long as they asked it I assume that it is not proper to pursue this line of questioning. They drew this out themselves and asked him to give his opinion, and

now I object to this line of examination.

Attorney General YOUNG: We now want to know how much it is worth.

Mr. HOLDEN: Well, that is hardly the proper way to get at it.

Attorney General YOUNG: We want to know whether we are to estimate the value of this opinion by reason of Mr. Stevens' eminence as an engineer, or by reason of his eminence as a citizen. We are perfectly willing to give him the right as a citizen to have all sorts of opinions about Mr. Hill and the managers of the Great Northern road, but we want to know whether he is giving that opinion as an engineer.

The MASTER: Well, proceed, gentlemen. I don't know that I have any power to restrict the counsel or the witness.

Q. You would be just as well qualified, would you not, to express the opinions you have expressed with reference to the possibilities in the future on these conjectural subjects if you never had studied engineering at all? They are mostly economic questions, aren't they?

A. Well, they are partly economic, and I think they are practical questions connected with the management of a railway.

Q. But you really didn't learn anything about them by the hard-headed work of an engineer?

A. I have done other things besides being an engineer.

Q. But when you came in here you spent a half an hour telling us of your experience as an engineer in order to give character to your testimony.

A. I was asked for my experience, and I gave it both as a civil engineer and as a railroad operator. I was not assuming—

Q. Now, the problem that is before the Court here is a problem which relates to rates, as you are aware; and what we are trying to get at is the basis upon which railroad rates should be computed; do you want to testify that all of the things that you have mentioned in your desultory talk here on the subject are

to be taken into account in fixing rates on railroads?

A. I am not expressing any opinion as to how rates should be fixed. I have simply been trying to give the elements that I think go to constitute the value of a railway.

Q. Well, value for what?

A. As a commercial proposition.

Q. As a stock-selling proposition, or as a carrying corporation?

A. As a commercial proposition, as a whole—value to the country.

Q. A railroad has a dual character, hasn't it?

A. Yes, sir.

Q. In one of its characters it is a corporation which has securities to sell upon the market, and the marketability of those securities depends largely upon the business character, the moral character, the business ability, of the men that are back of the enterprise; isn't that true?

A. All those things affect the value of a railway.

Q. They affect the value of the stocks in the market. On the other hand, and in its other capacity, a railroad is an instrumentality for carrying on transportation for the public, and in that capacity, irrespective of the price which its securities may bring upon the market in Wall street, it is entitled to reasonable compensation for its services, is it not?

A. I should say so.

Q. And when you undertake to ascertain what is a reasonable compensation, you must have a basis upon which the concern is entitled to compensation, as a starting point, must you not?

A. I should imagine so.

Q. Well, now, do you think that a railroad, the principal stock of which is owned by a good Christian of fine business ability, is entitled to any more rates than—

A. I know nothing about that.

Q. Than one owned by a profligate?

A. I have no opinion on the rate-making proposition.

Q. You could hardly take those things into account in fixing rates, could you, that you have been referring here to in your general talk?

A. They certainly are of account in fixing the true value of a railway. Upon the question of rate-making I have no opinion to express.

Q. Do you mean the stock of the railroad?

A. I mean the value of a railway as a going proposition. If is it represented by the stock it is supposed to be the stock.

Q. The stock represents the railway company, that is really the only representative of the railroad on the market, isn't it, its stock?

A. I suppose so.

Q. And its other securities. And the things you have been referring to would affect the market value of those stocks; it frequently happens, does it not, that the stocks and other securities of a railway sell very much above par while the stocks of another railroad might sell below par?

A. That is true.

Q. Of equal capitalization; and that is where this question of the business ability of its managers is of particular importance, is it not?

A. I couldn't say as to that. I only say, as I said before, to reiterate—

Q. Well, you don't want to testify that the railroad men of this country are possessed of any divine or superior wisdom or business ability over the average of business men of the country, do you?

A. Oh, no.

Q. And if any particular manager or any particular set of managers of any particular railroad went out of existence tomorrow, they could be replaced by men of equal ability so far

as the public service is concerned?

A. In time.

Q. Railroad men are fully up to the average of the first-class business men of this country, but no higher than that?

A. Oh, they are all on the same plane.

Q. It requires just as much business capacity to run any other large business as it does to run railroads?

A. I presume there is just as much difference in the business ability and character of other enterprises as there is in railroads.

Q. And if any particular man or particular set of men didn't take it into their head to construct a railroad where a railroad was needed, it is undoubtedly true, is it not, that some other man or set of men would undertake the enterprise and would furnish the railroad and transportation facilities?

A. They might and they might not.

Q. Well, don't you think that the demands and the necessities of the public with reference to transportation are what bring railroads and transportation facilities into being?

A. I suppose the supplying of railways is like the supplying of any other business; wherever there is a demand for it, capitalists see a chance for an investment and they invest. A railway is a private investment, as anything else.

Q. It is supplied in response to a demand?

A. Undoubtedly.

Q. And the creators of the demand are the ones who are at the foundation of the undertaking. They are also the ones, are they not, whose interests are most deeply concerned?

A. To whom do you rfer, General?

Q. I mean the persons who need the transportation.

A. Undoubtedly.

Q. And inasmuch as you have shown a very broad knowledge of the railroad proposition from the popular as well as the engineering standpoint, I presume you know, do you not,

that the government itself could have furnished these facilities and could have constructed the railroads, without waiting for any individual to do it?

A. Well, that is speculation; I presume they could.

Q. Well, that is a fact; that is not speculation. You know they could?

A. No, I don't know it.

Q. Well, how could they confer the right on others to do it if they couldn't have done it themselves?

A. Confer the right—you mean they could do it legally?

Q. They could do it legally.

A. Oh, I thought you meant practically. Why, undoubtedly they could do it. I suppose they could, although I am not lawyer enough to say definitely. I misunderstood you.

Q. As a matter of fact, there is a great deal in the nature of a railroad which is essentially governmental; it is the furnishing of highway transportation, and the furnishing of highways is in itself a governmental function, isn't it?

A. I don't know; I suppose it is.

Q. Therefore in undertaking to say what the value of a railroad is, the rights of the public in that road must always be considered?

A. Always. I am a very firm believer in the rights of the public.

Q. I got that impression from your general statement here of the things that go to make up the value of a railroad.

A. I think the first duty of any public utility is towards the public. Don't misunderstand me in the least.

Q. Inasmuch as the public or the government had the right to create and bring into being and to operate these transportation facilities, when they conferred the right on private individuals to do that work, they necessarily contemplated, did they not, that the private individuals would undertake the work under the same conditions and subject to the same re-

strictions that the government would have been subject to had it undertaken the work itself?

A. Well, General, I am not able to go back and fathom the minds of the people who made the laws. That is a question that I am not competent to answer.

Q. You are a part of this government and you make the laws as much as any other individual.

A. I know we make it, but what do I know what Daniel Webster had in his mind or some member of the legislature twenty years ago? You said what they had in mind; I don't know.

Q. I am speaking about the theory upon which this right to operate highways was conferred upon private individuals. If all of the rights that you have mentioned enhance the value of the property of the persons who undertake the construction of these highways, the right even to capitalize which you suggest, the superior business ability of any particular man or set of men in charge of a railway exists, then there is no difference between the rights of the persons engaging in railroad business and those engaging in purely private enterprises, is there?

A. I don't quite understand that question. I don't know that I said outside of the possible value of a franchise that there were any rights. I say that managerial ability, traffic connections, acquaintance throughout the country, possibilities for the future, probabilities of the future—all those things are inherent in certain railways, and therefore they are of value and should be taken into account in fixing the value of a railway.

Q. Let me understand you: Do you regard the construction and operation of a railroad as a private enterprise or as a public enterprise?

A. I don't know that I ever thoroughly settled that in my mind yet. I will admit I have given the matter some thought.

Q You can't make up your mind?

A I know that it is a public utility, and I think that its first

duty, regardless of anything else, is to the public.

Q. What kind of a duty do you have in mind? the duty to render efficient service at a reasonable rate?

A. Exactly.

Q. As a matter of fact, the relation of the railroad to the public is such that the railroad company can't be compelled to do business at a loss, and, reciprocally, the public have a right to insist that it shall not make an excessive income; that situation differentiates railroad property from all other property, does it not?

A. I think you are getting into a realm that I wouldn't care to express an opinion. You are getting pretty deep for me.

Q. I am not getting any deeper for you than you got for me a while ago.

A. I made a study of this as an economical problem, but I couldn't speak of the legal end, there you would have the advantage of me, for I am not a lawyer and I haven't made a study of these legal technicalities.

Q. Well, that isn't a legal technicality.

A. Well, it looks like law to me.

Mr. O'BRIEN: It ought to be the law.

Q. Well, it ought to be the law.

Question read.

A. I think your first two propositions are correct; I don't think any railway honestly managed should be permitted to do business at a loss, and I don't think the public should suffer from excessive rates.

Q. Do you know of any other business or concern that is so fortunately situated as to have the absolute right to make a profit at all times?

A. No, sir; I don't know that I do.

Mr. BUTLER: The legal right, do you mean, General?

Attorney General YOUNG: Yes, sir.

Mr. BUTLER: Do you know of any concern that hasn't the

legal right to make a legitimate profit at all times that it can?

Attorney General YOUNG: I know of lots of enterprises that don't. I wish somebody would tell me how I could make a profit all the time.

WITNESS: Here is this difference, though: if an ordinary private man goes into business and meets with a loss and sees a continued loss, he can stop, but a railway can't.

Q. But the ordinary business undertaking assumes all of the hazards of the business which include the chances of loss as well as the chances of profit, and must compete with all others engaged in the same line; isn't that true?

A. It must, if it continues in business. I think I said—if I didn't, what I meant to say was this: that a railway ought not in justice to be forced to do business at a loss if it is properly conducted. Whether a law could be made that would guarantee it, that is a different thing; I have nothing to do with that, I know nothing about it.

Q. Now, if we assume a road constructed across the state of Minnesota twenty-five years ago, what would that road be entitled to an income on at the time it was turned over to the operating department?

A. Oh, I don't know, General. A road built twenty-five years ago would be entirely different in all physical characteristics from a road built now, you know.

Q. What I mean is this, would it not then be entitled to an income upon what it had cost, wouldn't that have been the basis?

A. I don't think so. Do you mean at that time?

Q. I think the question was plain enough. (Last question read.)

A. I wouldn't care to go into that; I don't know.

Q. After it was turned over to the operating department of the Company, it would naturally require the expenditure of more money during the succeeding period of ten years for bet-

terments and improvements, and to some extent for replacements, perhaps, and assuming that all of that money was paid out of capital account, what do you think it would be entitled to an income upon at the end of the ten-year period that I have assumed?

A. The value of the road, taking all of the elements into consideration that I have mentioned.

Q. Would the cost of the road, in the first place, and the amount expended upon it for permanent improvements and betterments, be the measure of what it was worth as a transportation facility at that time?

A. Adding the other elements that would naturally accrue to it as time goes on as the road becomes more and more valuable.

Q. As soon as a road is finished, then, on your theory, it would necessarily be worth more than it cost, worth more than the money that has been invested in it?

A. Undoubtedly—if it is well managed.

Q. And it should get an income on more?

A. I haven't said that; I have confined my observations to the value.

Q. What do you mean?

A. I mean as a commercial proposition.

Q. What do you mean by commercial proposition?

A. Its value as a going proposition.

Q. Value for what?

A. To the country it serves and the people that own it.

Q. Value as an earning enterprise?

A. Largely.

Q. Well, your proposition necessarily means, does it not, that the value of the undertaking upon which its income should be computed in order to determine whether it was reasonable or not must be something more than the money that was put into it, and that that principle would apply to it from the very beginning?

A. I have said here several times that the great question of what is the value of a railway never to my mind has been settled. What is the value of a railroad? I don't know whether any competent authority has ever passed upon what is the value of a railway. I have simply given you my opinion of the elements that go to make up a value. What that value is when you get it I have not expressed an opinion upon.

Q. You said a little while ago, didn't you, that there was no question but what the railroad was not entitled to more than a reasonable income? Upon what basis is it entitled to that reasonable income?

A. I don't think any investment is entitled to more than a reasonable income.

Q. Well, you must mean something when you say that.

A. Well, that is merely a general statement.

Q. What is the reasonable income? that is, upon what basis should it be computed, according to your ideas?

A. I have no ideas on the subject, General.

Q. And anything that you have said in your testimony here is not to be considered as having any bearing upon or relation to the question of the basis upon which the Great Northern Railway should be entitled to an income?

A. The general value of railways in this one particular should include the elements that I have given.

Q. The value for what purposes—as an earning undertaking?

A. Oh. I presume so, yes.

Q. Well, let us understand one another, finally. Is it your theory that the income should be computed on this theoretical and speculative alleged cost of reproduction or upon some other basis?

A I don't admit that it is,—I deem that the reproduction figures are an inventory to which should be added certain intangible but existing features that affect and enlarge the valua-

tion; the earning capacity of the road should be based upon that total value.

Q. The earning capacity should be based upon that total value?

A. Yes.

Q. And that is your opinion of what constitutes reasonable rates?

A. I am talking about the earning capacity, I am not getting into the rate matter—I am not a rate expert.

Q. You were very free to say that you thought a railroad ought not to have more than reasonable rates; isn't that true?

A. I don't think that capital invested anywhere should be allowed to earn an exorbitant interest. What the amount of such interest is is a matter that I am not capable of passing upon.

Q. Do you think that by taking a base like that, any regard would be paid to the so-called interests of the public in this carrying enterprise?

A. I do, certainly.

Q. Do you think it is to the interests of the public to pay railroads for fictitious capital and an income on watered stock?

A. I am not venturing into that, I know nothing about it.

Q. Well, you think, do you not, as a practical railroad man —and I understand you are the vice-president of a railroad— that a railroad ought to be permitted to issue securities to the full extent of its value?

A. My duties as vice-president never carry me into the financial end of it, I simply run trains.

Q. You are a stockholder in railroads, aren't you?

A. To some extent.

Q. Well, you have some opinons as to the basis on which stock ought to be issued?

A. I have never made that a study and I have no opinion to express.

By Mr. O'BRIEN:

Q. Last Saturday we were considering the question of the inventory presented in this case, based upon the theory of the cost of reproducing the road; is that true?

A. Yes.

Q. And I understood you to say that in and of itself so many speculative and imaginary features entered into the inventory that you did not consider it of any great value in arriving at the real value of the road.

A. Why, I mean to say this, that it would be impossible and impractical to go ahead and carry out to a logical conclusion the reproduction of a road on that basis.

Q. Now, if the value of the road is made up of the actual physical value of its properties, these elements which you have mentioned today—good-will, earning capacity, honest management, franchise,—an inventory showing its actual true value would be of great assistance, would it not?

A. It would be one element entering into it.

Q. Well, it would be the first basis, would it not?

A. It would be a basis, yes.

Q. And of necessity good will, franchise value, and everything else, would have to be built up from this inventory?

A. Well, I don't understand what you mean by "built up."

Q. Well, they would be based upon it, would they not?

A. They would be some of the items.

Q. Now, you were confining yourself to the problem of getting at the actual and true value of a railroad; am I right in that?

A. Trying to approximate it as near as I can.

Q. The problem that we will suppose you have set yourself to is arriving at the true and actual value of a railroad. Now, the first consideration in that matter would be the actual value of the physical property held by the railroad, would it not?

A. That would be a large element.

Q. Wouldn't that be the first consideration that any practical man—

A. Undoubtedly.

Q. —would look at?

A. To be candid, it would, yes.

Q. That is what I want you to be, Mr. Stevens. Now, after you had arrived at that, you say (and I think very correctly) that so far as the value of the road as a commercial enterprise is concerned, you have to take into consideration its situation, its facilities, its connetcions, its management and the prospect for the future—its good will, in other words—isn't that true?

A. Yes.

Q. This cost of reproduction as shown in Ex. 2 in this case does not show the actual, true physical value of the property, does it?

A. Well, I think it shows, Mr. O'Brien, as nearly as can be made, the inventory at the time.

Q. Yes, an inventory, but is it not prepared upon hypothetical assumptions, untrue assumptions and impossible assumptions?

A. Well, I don't quite understand that question.

Q. Is it not impossible to imagine the elimination of this road and the condition of the country surrounding it as it is at present?

A. Why, I will agree with you in that, yes.

Q. Is it not impossible to imagine the construction of this road beginning now and extending over a period of eight years when the road is at present actually constructed?

A. Well, it would be pretty hard to me, Mr. O'Brien.

Q. Is it not impossible to imagine the expenditure of twenty-seven millions of dollars of interest upon money that will never be borrowed?

A. Why, there is no doubt about that—if you couldn't borrow it you wouldn't spend it.

Q. And is it not impossible and absurd to imagine the borrowing of that money and the paying of interest upon that money to pay for the destruction of buildings which have never been built?

A. Well, if you go into that you might say the whole thing is impossible; but now just—

Q. Just wait a minute.

Mr. HOLDEN: Let the witness answer, Mr. O'Brien.

Q. So that if you desired to commence your valuation as a commercial concern of the railroad from a basis of fact you cannot take the cost of reproduction as that basis?

A. I explained this morning that it is an inventory. Now if you will let me explain I will tell you what I mean.

Q. It is an imaginary inventory, isn't it?

A. No, sir.

Q. Is the interest real?

A. Here is the railroad company.

Q. Is the interest real?

A. I decline to answer.

Q. Are the buildings which are to be destroyed upon that right-of-way to be acquired real?

A. They would be real if they were rebuilt.

Q. Are they real at the present time?

A. Are they on the right-of-way?

Q. Yes.

A. Undoubtedly.

Q. The buildings that are imagined that will be purchased and destroyed?

A. Undoubtedly.

Q. They are in existence now?

A. You mean the railroad buildings?

Q. No, no, no.

A. Oh. You are getting me into a realm that I don't understand at all what you mean.

Q. Then you don't understand this question?

A. Yes, I do too, if you will let me give my view of it.

Q. Well, of course we will come back again to this question, Mr. Stevens; if you want to make any other explanation you can.

A. Here is a railway; it might be a manufacturer, it might be a farm, it might be anything. Now there is certain property there; in this case it happens to be cuts and fills and bridges and road crossings and machines and buildings. Now then we want to know what it would cost to reproduce it. You can do nothing better than to go out and make an inventory of the current prices, and when you get through you have got an inventory. Now then, if this was all obliterated, Mr. O'Brien, it would be impossible to at once reproduce it, that is without question; it would take a certain length of time. Judgment would seem to indicate it would take eight years in this case—I don't say but what it could be built in less. A certain amount of money would have to be spent—which, as far as I know, nobody would allow you the use of without you made them a large return in the shape of interest. Now you can call it imagination or anything you like, but it is the only absolutely correct way I know of of getting an inventory. Of course I understand that—

Q. Do you know that in this inventory the market value of real estate contiguous to the right-of-way has been multiplied by three upon the assumption that if the right-of-way had to be acquired at the present time the railroad would be compelled to pay three times the actual market value of the land, either because of an excessive demand upon the part of the owners of the property or because of being compelled to pay severance damage?

A. What is severance damage?

Q. Severance damage is the damage to the remaining property from constructing the right-of-way.

A. Consequential damages?

Q. Consequential damages, or because of being compelled to purchase buildings which might have been erected upon the right-of-way if the railroad had not owned them, which buildings would be useless to the railroad company and therefore their cost an entire loss.

A. I have heard that lands in the country for right-of-way have been estimated at three times their value as farm lands.

Q. Did you know that this inventory contained a valuation based upon that theory?

A. I have heard that is the way the lands had been valued as a rule.

Q. Do you say that that gives you the actual value?

A. Actual value?

Q. Yes.

A. No, I don't answer it one way or the other, because I don't know.

Q. Now, all you mean is that if you have an embankment, the quickest way of arriving at the value of that physical embankment is to ascertain the number of yards and find out what it would cost to put them in the embankment?

A. That is the way it would seem to me.

Q. If you had ten miles of rails, the quickest way to ascertain the value of those rails would be to go into the market and find out what rails cost per ton?

A. Undoubtedly.

Q. And so far as this cost of reproduction is to be applied to matters which are upon the market and for which comparisons can be obtained, take the correct inventory and apply the present prices and you have found the real cost; isn't that correct?

A. As near as you can approximate it, yes.

Q. And where this inventory or theoretical cost of reproduction goes beyond that and goes into matters of mere specu-

lation and imagination, you don't pretend to agree with them or to vouch for them; isn't that true?

A. I say that you can't without involving yourself in some of those speculations. Your inventory is the nearest and best way that I know of to approximate the value or that part of the value.

Q. Now, having found the true value of the property, the real physical value of the property, you assume that those other elements are to be added to it for the purpose of arriving at its value as a commercial enterprise?

A. I assume you don't have the real true value of the property unless you do take these into consideration.

Q. No! Now it is entirely true, is it not, that a well-managed railroad, judiciously built, in a thriving community, commanding a large tonnage and with a certain future, is worth more as a commercial proposition than a badly managed, foolishly built railroad, in an unproductive country?

A. Oh, undoubtedly.

Q. And all of those conditions which you mention give to the securities of the road an increased value, do they not?

A. They should.

Q. That is, they give a certainty of return, of a fair return, upon proper securities, do they not?

A. They give a better assurance.

Q. Give better assurance of a return. They do not justify rates which are excessive in order to pay a return upon the good faith of the builders of the railroad or upon the prosperity of the country surrounding it, do they?

A. I think they are entitled to a just return on the value of the property.

Q. You think they are entitled to a just return on the value of the property, but do you think that the owners of the property are entitled to a return upon the prosperity of the surrounding country?

A. I think they are entitled to share in the prosperity.

Q. Are they entitled to capitalize it?

A. I think they are entitled to capitalize it if it involves the value of the property.

Q. So that every time the country surrounding a railroad increases, that may increase the value of the railroad property and that should be added to the capital account of the railroad?

A. Every time that the country increases, every time traffic increases, the railway company must necessarily increase its facilities and invest more money in getting additional facilities to handle that traffic. They are certainly entitled to a return upon it.

Q. Upon every additional dollar they invest—nobody disputes that—but do you think that when a city or a municipality gives a street to a railroad company, the railroad is entitled to capitalize the value of that street and then earn dividends upon it; or isn't it an additional facility that is given the company to enable it to transact its business and earn a fair return upon the capital which it has actually invested?

A. Well, I don't know that my attention was ever called to any cases of that kind; I don't know anything about it.

Q. You don't know, then, that the inventory presented involves the value of reproducing the streets that were given to the railroad company in the terminals?

A. No, sir; I don't know anything about the real estate end of this proposition.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. I understood you to say that you didn't feel competent to put into percentages the amount to be added to the physical value because of the elements which you suggested as adding to the value of the property as an instrument of commerce?

A. No, I don't think I would want to give any exact per-

centage or even a proximate one. I am satisfied it would be a good deal.

Q. But of course the amount would be relative to the value of the physical property?

A. It would bear some relation, of course, if you could reduce it to dollars and cents.

Q. What I mean is this, that the amount which you add to a road worth two hundred millions would be much larger than the amount which would be added to a road worth twenty millions.

A. You mean in percentage?

Q. No, I don't mean in percentage, I mean the gross amount.

A. Well, naturally the larger the road, the more country it traverses, the more mileage it has, I should say that its value should be increased more than a smaller road.

Q. The segregated addition for good will or franchise value, or any of these individual values that you spoke about, would be larger for a large road than for a small road?

A. I should say so.

Q. And that brings us back to the proposition that the original base, the actual value of the physical property, should be definitely determined?

A. As nearly as practicable, yes.

Q. And that would in fact constitute the base for the subsequent calculations?

A. No, I don't regard it quite in that light.

Q. If the aggregate amount to be added for good will for the road as a going concern as an instrument of commerce for its holdings of franchises and rights and privileges increases with the increase in the actual value of the physical property, you must first ascertain the value of the physical properties in order to properly estimate what amount in the aggregate should be added to that; isn't that true?

A. No, I don't know as it is quite true.

Q. Then when the amount to be added is controlled by the amount in value of the physical properties, it is not essential to arrive at the value of the physical properties upon a sound and proper basis?

A. Naturally, the larger the physical valuation simply would imply more mileage, greater system, other things being equal. That would mean, for instance, in the case of franchises, you would enter more towns, your franchise value would be larger naturally, too, it would seem that your business interests through the good will, through the connections you had established for years would be larger, so that your additional values might be based partly on higher physical valuation for a bigger road, it might be based on the amount of business.

Q. Do you regard the ascertainment of the true physical value the correct method of determining the mileage of the road or the tonnage carried by it? Those are matters that are obvious, are they not?

A. I don't quite get your question, Mr. O'Brien.

Q. Well, do you consider it necessary, in order to ascertain the mileage of the road or to ascertain the amount of tonnage carried by it to ascertain the value of its physical properties?

A. No, sir.

Q. No! If all you wanted to know was the mileage of the road and the number of towns it entered and the amount of tonnage carried by it, you would go to the records and find out, wouldn't you,—that would be at least a simple, direct way of doing that?

A. Yes, sir.

Q. So that we have not gone to all of this trouble to arrive at the physical values of the road for the purpose of determining its mileage?

A. Its mileage is a fixed quantity, a matter of record.

Q. Yes, its mileage is a fixed quantity; but you said that

the aggregate amount to be added for the elements which may be described as good will, franchises, rights and privileges, would be increased as the physical value of the property would be increased?

A. I think it would be.

Q. Yes; if they exist, that is absolutely certain, isn't it?

A. It would seem so.

Q. Therefore, if you fix the physical values upon a false basis or upon an imaginary theory, the base for the calculation of your subsequent elements is wrong, is it not?

A. Not altogether, no.

Q. Is it wrong in part?

A. It might be.

Q. Isn't that a universal rule, if you adopt as a premise or as a base for a subsequent calculation an erroneous theory, that your result must be erroneous?

A. If the premises are entirely incorrect your conclusions will never be correct.

Q. And insofar as they are incorrect, your conclusions will be incorrect?

A. Undoubtedly.

Q. Now, the best and surest method of obtaining a grossly excessive result is to commence by exaggerating the base, isn't it?

A. Why, I suppose so, logically.

Q. And an error in the foundation for the calculation of necessity is much more serious than would be a similar error in the later or concluding deductions?

A. Yes.

Q. It is entirely true, I believe, Mr. Stevens, that a roadbed increases in value with age?

A. Certain parts of it does.

Q. That comes from the fact that the roadbed is worked, ties are tamped and filled in, the grades are gradually adjusted,

the drains made to accommodate the conditions where they are located, the roadbed itself solidifies, allowing a proper road for the running of heavier trains and matters of that sort?

A. Yes.

Q. Practically all of those additions are made by the ordinary working force upon the road, are they not?

A. I don't know what you mean by the "ordinary."

Q. The section men.

A. No, sir.

Q. Is it not true that practically all of the matters that I have mentioned result from the work of the section men upon the road?

A. Oh, no, only in a degree.

Q. By the passage of time?

A. Extra gangs.

Q. And the passage of time?

A. Extra gangs work as well as the ordinary section crew.

Q. Yes, of course there are extra gangs at work, but a great deal is done by the section men?

A. Some is, yes.

Q. In other words, this increase in value, except where some material and easily observed change is made in the road, comes from the operation of the road itself?

A. And time.

Q. And time?

A. Yes.

Q. That is true, isn't it?

A. I think so. Well, I will qualify that by saying in the ordinary operation by the ordinary number of men required; we are working more forces all the time, you may call them whatever you like.

Q. But it does come from the operation of the road?

A. It comes from the operation and maintenance and the additions you put on and all that sort of thing.

Q. Where the additions are paid out of capital and as an additional investment, that is a matter of record, I presume, is it not?

A. It should be.

Q. It would be fair to assume, if you were endeavoring to ascertain that fact you would insist, with a road on which good books were kept, that that could be shown?

A. Yes, sir.

Q. And it would be entirely fair to assume that all expenditures for those purposes which did not appear as investment out of capital were paid for out of operating expenses?

A. They might and they might not be.

Q. If you were told that as a matter of law it was incumbent upon you to show that fact, would you not say then that the proper assumption would be that where it was not shown, they were paid for out of operating expenses?

A. I should naturally assume, if it was my work and I was responsible for it, that I would find out what the law was and try and obey it.

Q. You have not expressed any opinion as to whether or not that element of increased value should be considered by the Court in arriving at a proper basis upon which to fix rates?

A. I have not had any opinion about rates.

Q. No; and you would not want here to be understood as claiming and as implying from your testimony that you do express any opinion as to whether that should be considered by the Court in arriving at a proper basis upon which to compute rates?

A. I have not expressed any opinion as to what is proper in a rate-making proposition; I would simply say that is a part of the value of a railway.

Q. I think, Mr. Stevens, that we can all agree on that, and I am simply endeavoring to ascertain what you do claim to testify to, because you are here as a voluntary witness and

we are entitled to know what you claim is the effect of your evidence and what it is directed to. So you confine yourself in that matter to a statement that the value of the road does increase from the use and operation of the road, as you have described?

A. I say the value of certain parts of the whole—certain elements.

Q. Yes, of course I should have confined myself to that; my statement was a little inexact. Now, I understand, Mr. Stevens, your testimony is to the same effect with reference to these other elements of value which you say should be added to the actual physical value; you don't assume to say as to whether or not these are proper elements to be taken into consideration in arriving at a proper basis upon which to fix rates?

A. I know nothing about the matter of fixing rates; I don't attempt to say what is the basis.

Q. Now, have you examined this exhibit 2 here sufficiently to ascertain if the method adopted is entirely the same as yours was in ascertaining the cost of reproducing the New Haven road?

A. Yes, sir.

Q. Well, did you make any allowance for contingencies in that case?

A. Yes, sir.

Q. As such, directly as contingencies, or was it included in some of your other estimates?

A. I think we made an allowance for contingencies.

Q. Well now, I think we ought to settle that. (To Mr. Morgan.) Have you got that, Mr. Morgan? Mr. Stevens, I hand you what I understand to be a copy of your report, which Mr. Morgan has, will you just look at it and ascertain whether it is a copy or not and also as to whether you did make an allowance for contingencies?

A. I couldn't say, of course, without it being identified;

but I should say that it was a copy.

Q. Well now, if you can, refresh your recollection from that (simply your recolection of it) and say whether or not you made an allowance for contingencies.

A. I did.

Q. And where does that appear in the report?

A. It is in the different items through here.

Q. That is what I asked you. Does it appear as a separate item?

A. I don't know whether it does or not. But I know I made an allowance for contingencies, item by item, right through.

Q. Oh well, I asked you that before I showed you the report, whether it appeared as a distinct and separate item.

A. I didn't understand that.

Q. It doesn't, does it, in your report?

A. I don't think it does; it shows on the face of it.

Q. It shows on the face of it, that that is a copy, but using that to refresh your recollection, can you say now whether in your report you actually did?

A. I did make an allowance for contingencies.

Q. In a separate item?

A. No, through the items; for instance, we carried it right through.

Q. You have now a recollection that you added that to each item?

A. Certainly, to the items.

The MASTER: A fixed percentage?

WITNESS: Yes, different percentages on different items.

Q. Could it be told from your report what that percentage amounted to on the total of the items?

A. I don't think it can, no.

Q. Could you ascertain that when you see your report yourself?

A. Oh, I might figure it out by going back through all the details.

Q. Would it be very much trouble for you to write after you got home and tell what that was?

A. I don't think it would be.

Q. If it wouldnt be too much trouble, I would be very glad if you would do that.

A. I will see what I can do. I will do the best I can. I would like to say, Mr. O'Brien, if you will permit me, in regard to these documents, I said the other day that we had just closed the valuation, the physical work, last week; that was strictly and technically true, but it might mislead you a little. The work was nominally closed as of June 30th, last year, and I laid down general rules and attended to the details previous to that time. Some of the work extending over eighteen months back; then, as you may not know, the New Haven road so-called, (the system) covers a great many separate corporations, and I found when we got through that the matter wasn't properly segregated as between these little individual corporations; some of the roads the New Haven road owns outright, owns the stock, some old lines, you know, and things like that; and so it was necessary to open the thing up again and go through and redistribute, pick out, you understand, between the different railroads. That extended the work up to very recently. So that a great many of these figures, you know, in the aggregate I couldn't carry in my mind from a year and a half ago.

Q. Oh, no.

A. I just state that as a matter of explanation.

RE-DIRECT EXAMINATION.

By Mr. HOLDEN:

Q. In your examination on Saturday Mr. Stevens, you referred, I think, to the fact that while you were in Panama

you purchased in this country a large amount of materials and supplies. Now, you left Panama, as I understand it, April 1st, 1907?

A. April 6th, 1907. My connection with the work ceased, though, April 1st.

Q. Well, will you briefly state something of the nature of your purchases and in what parts of the country you made them and what the purpose of those purchases was.

A. The purchases were made by the Isthmian Canal Commission. As everybody understands, of course, the Commission was charged with the carrying out of the work, of which I was chief engineer and chairman for a while and for some time as commissioner. These purchases were made through a purchasing agent located at Washington, but were all made on requisitions for supplies from the local offices on the isthmus, and as the head of the engineering department for a long time and a part of the time as the whole department (the whole works, sanitary and all) nominally all of these requisitions were made out by myself, that is, by my men. In a general way, of course, I exercised supervision over them. According to the governmental rules supplies except on emergencies were purchased on ninety days publication notice, invitation for tenders, for bids; these supplies were inspected and delivered on the isthmus. There they were properly invoiced; that is, they were checked, rather, by my men, and receipted for, and of course a due return had to be made for them, and in this checking in a general way I had knowledge of prices of material of all sorts. We bought, I suppose, the list would pretty nearly coincide with an abstract from the lists of every supply house of every known thing almost in the United States. Of course we didn't buy ice, we made it there, but we did buy ice-machines; we bought outside of commissary supplies all sorts of building materials, brick, lumber, hardware of all kinds, building paper, roofing tin, roofing steel, iron, clay pipe,

both for sewers and waterworks, painting materials, white lead, etc., oils, all of the various kinds of railroad supplies that are demanded on a road anywhere, and I couldn't give you the list this afternoon even if I could remember it. There was everything, I suppose, with few exceptions, that are purchased in the United States for enterprises of any sort.

Q. During that time did you rebuild the Panama railroad?

A. Practically, yes, sir.

Q. And for that purpose did you purchase all of the different items of materials and supplies largely in this country?

A. Yes, sir.

Q. In what portions of the country?

A. Why practically all parts of the United States, depending of course on the individual bids. Our lumber came altogether from Puget Sound and our gulf states. As I happen to recall, I handled, bought, and there was delivered, during my regime there. I can't give it to a unit, but I think between seventy and eighty million feet of lumber; our purchases were very large. I suppose that I averaged to buy six to eight hundred thousand dollars worth a month; our orders were tremendous, of course.

Q. Is that true of rails and articles of iron and steel that enter into railway construction?

A. Oh, they were all bought in the United States.

Q. Well, from that statement of facts, are you able to say that you became and kept yourself familiar with prices of railway material in the United States during that time?

A. Oh, generally speaking, yes; I kept in touch with the situation.

Q. Will you state whether or not in your judgment the railroads and terminals in the state of Minnesota of the Great Northern Railway Company are well located, well built and well-equipped for handling the traffic of the country, tributary to them in a reasonably efficient and economical way.

A. Why, yes, I should say they are.

Q. If I understand the result of your examination, you have expressed the opinion that it is not impracticable to make an approximately accurate inventory of the physical property of a railroad such as the lines of the Great Northern in this state, based upon prices at a given date and upon quantities taken from records or estimates?

A. Why, I think that is the nearest way, the best way to do it that I can conceive of.

Q. That is to say, making an inventory of the physical elements that enter into the property?

A. Yes, sir.

Q. Now, then, from your consideration of Ex. 2-Hogeland, outside of real estate (the part which you have stated you do not care to express an opinion upon) state whether or not you regard that exhibit such an inventory of the physical properties of the Great Northern railroad in the state of Minnesota.

A. Why, I think so.

Q. You were asked something in reference to certain of the items of the exhibit in relation, for instance, to I think it was water-stations, structures of that kind, and perhaps station buildings; I don't know that I am clear on the subject, but I would like to see if I am: you have not made an examination of the quantities or the number, but have relied upon the accuracy and honesty of those who made up the exhibit in stating the quantities and the number?

A. Yes, sir.

Q. Now, on the subject of the prices, or, more accurately speaking, on the subject of the amount shown as the cost of rebuilding such structures, have you given those items sufficient consideration to express an opinion as to whether those sums are reasonably correct?

A. Yes, sir, I think within reasonable limits; and my judgment would be that they were.

Q. Your report on the subject of the properties of the New York, New Haven & Hartford road, has that been made public to your knowledge?

A. Not to my knowledge, no, sir.

Q. Well, at the time you began on that work, or since, are you advised of the purpose of your company in having that work done?

A. No, sir.

Q. Something has been said on the matter of depreciation and you have expressed your judgment in some respects on that subject in its relation to certain parts of a road. Now, for transportation purposes, is a building or a structure, track or bridge, any less efficient when it has been properly maintained or any more efficient than a wholly new article of the same kind?

A. No, they would be of equal value; both would be, in my opinion, of the same value for transportation purposes until the business had outgrown the capacity, for instance.

Q. Well, I included in there the word track.

A. Well, I didn't notice track; I had my mind fixed on buildings.

Q. Yes, I included perhaps different elements that could not be properly placed in the same question, but confining the question to structures like buildings?

A. No, I don't think a new building would be of any more value for transportation purposes than an old one, provided the old one was kept in proper repair.

Q. Now, are there elements in the railroad property of age, and which has been successfully operated which appreciate in value?

A. What is that?

Q. I say are there elements in a railroad property of age, and which has been successfully operated which appreciate in value? You referred a while ago to the road-bed which in the

process of time becomes in better shape; I was directing your attention to matters of that kind.

A. Why, certainly; I think they appreciate in value.

RE-CROSS EXAMINATION.

By Mr. O'BRIEN:

Q. Mr. Stevens, I understood you to say that for transportation purposes a piece of equipment or a structure was of as much value when it was old, provided it was in good repair, as when it was new.

A. Until the business outgrows its limits.

Q. That is, a box-car five years old that is in good repair will earn as much per mile as a perfectly new box-car?

A. Of the same capacity.

Q. Yes, of the same capacity; is that what you mean?

A. That is what I mean.

Q. But the actual value of that old box-car upon the market isn't the same?

A. Well, I don't know as there is any market value for old box-cars.

Q. Did you not, in your report upon the New Haven road, after ascertaining the cost of reproduction, make an allowance for depreciation and deduct that from the reproduction cost, for the purpose of arriving at present value?

A. All of the inventory or estimate of the present value of the equipment of the New Haven road was made by the superintendent of motive power; I had directly nothing to do with it except to accept his figures.

Q. Well, did you accept his figures?

A. Yes, sir.

Q. And did they make an allowance for depreciation?

A. I think they did.

Q. The report as finally sent in was your report, was it not?

A. Well, I didn't sign it, but I simply collated it and sent it in.

Q. It was your report, wasn't it?

A. Why, it is generally considered so, yes.

Q. You supervised it?

A. I supervised certain parts of it, and I accepted other parts.

Q. Now, is it not a fact that the actual value of an article decreases generally from use, wear and time?

A. That depends on the article and the use that it is intended for.

Q. Well, now, Mr. Stevens do you or do you not claim that railroad property, the physical property of a railroad, is exempt from the general law of decay?

A. No, sir; I don't claim that.

Q. And if it does decay, it decreases in value, does it not?

A. Well, I will answer that by saying that decay occurs, but decay is taken care of by maintenance. If the sills of a wooden building rot we put on a new—

Q. Do box-cars wear out?

A. —the new sills are replaced.

Q. Do box-cars wear out?

A. Do they wear out?

Q. Yes.

A. They become useless in time, because their capacity is not sufficient to handle the business economically.

Q. And they also wear out, don't they?

A. Why, they wear and are replaced. I suppose you take a box-car twenty years old, or any machine, practically, there is very little of the old boards there at the end of twenty years.

Q. The older the car the more repairs are necessary, I presume?

A. Oh, to a certain extent; that depends on how faithfully the repairs have been kept up. That brings in the question of

honesty and capability of management.

Q. And the more the repairs the more the expense?

A. Why, certainly, where there are more repairs there is more expense.

Q. Now, of course, it comes back again to the original proposition, doesn't it, that the purchase of a certain amount of wood or iron, by a railroad company doesn't change the substance?

A. Not at all.

Q. It is still subject to be warmed by the sun and chilled by the cold?

A. Yes.

It was consented that copy of Ex. 13 be substituted for the original notice offered in evidence on Saturday last, being Complainant's Ex. 13-Hogeland.

An adjournment was here taken until Tuesday morning, March 30, 1909, at 10 o'clock.

Fderal Building, St. Paul, Minn., Tuesday, March 30, 1909.

The hearing was resumed at 10 o'clock A. M.

LESTER B. ELWOOD,

sworn on behalf of Complainants, testified:

By Mr. How:

Q. Your name and age, Mr. Elwood?

A. Lester B. Elwood, fifty-two years of age.

Q. And you live in Minneapolis?

A. Yes, sir.

Q. How long have you lived there?

A. Since May, 1875.

Q. What is your occupation?

A. Real estate dealer and mortgage-loan broker.

Q. What is the general nature of that business or the particular branch of it, if any particular branch, in which you are engaged?

A. The firm with which I am associated, or rather the corporation, the Corser Investment Company, act as agents in the purchase and sale of Minneapolis real estate and some outside real estate; it buys on its own account and on joint account similar property; it negotiates mortgage loans on Minneapolis and other property for its clients and for itself and for the different members of the corporation—officers of the corporation.

Q. To what extent is it and has it been necessary for you to keep acquainted with the value of property in Minneapolis from time to time?

A. The foundation of our business and the successful operation of our business absolutely requires a close and accurate knowledge of all values of the property so handled and dealt in and loaned upon.

Q. And have you kept in touch with such values in your business?

A. I have.

Q. And during the whole time that you have been engaged in it?

A. The first few years I was not in as close touch, but for the past twenty years I have made a special study; in fact, that has been my special department of the corporation that I was with; my valuations have been taken by the firm as the valuations of the firm.

Q. What experience have you had in valuations in connection with any official or semi-official positions?

A. I have been, for a number of years at different periods, and am now, a member of the valuation committee of the Minneapolis Real Estate Board. This committee is composed of five members of the board, the board consisting of about 125 real estate dealers, and is supposed to be picked from the best qualified members of the board. I was chairman of the committee for six or eight years, up to about the time I made the valuations for the Great Northern road in Minneapolis. I ceased to be a member of the committee and was re-elected again a year ago. I have also served, for four years, up to the first of last January, as the Hennepin county member of the state board of equalization, before whom the values of different properties have been quite generally brought and passed upon.

Q. What are the functions of the valuation committee of the real estate exchange, (or board, perhaps, as you call it)?

A. To make written appraisals of the value of property in Minneapolis, Hennepin county, and sometimes in other parts of the state of Minnesota, on applications for valuation which are made to the real estate board; that is, when such applications for valuations or appraisements are made to the real estate board, to its president or to its secretary this is in turn placed in the hands of the valuation committee of the board, who examines the property, makes a written valuation of same, a copy being given to the applicant, and a duplicate filed with the secretary of the real estate board.

Q. For what purpose do applicants make such applications?

A. To arrive at the fair and proper valuation of the property that they wish an appraisal of.

Q. With what end in view, so that they may be advised and sell?

A. For many reasons; savings banks that wish to negotiate loans, or insurance companies, or residents and non-residents who have offers for their properties and not being well advised as to its value apply to this board for a valuation; in fact, there are dozens of applicants of that character.

Q. And they are supposed to be somewhat final in their nature when made, and are supposed to be acted upon by owners and others interested?

A. That is true.

Q. In the fall of 1906, I think, Mr. Elwood, you and Mr. Barney and Mr. Ridgeway, of Minneapolis, were employed for the purpose of making an estimate of the proper valuation of railway properties within the limits of the city of Minneapolis; is that the fact,—was it in the fall of 1906?

A. Yes; I think we were to appraise not exactly the railway properties, but the real estate, the lands upon which the terminals and the right-of-way are.

Q. My remark was perhaps inaccurate, but intended to be merely preliminary. Will you state the circumstances attending the transaction of your employment and the terms of the employment and the instructions given to you at the time of the employment?

A. I was communicated with by Mr. Woodman, then the land commissioner of the Chicago, St. Paul, Minneapolis & Omaha Railway, either by letter or telephone, (I don't remember which) to call at his office; I did so, and he asked me if I would undertake the appraisal of the real estate in Minneapolis used or occupied by several railroads, said real estate being the land upon which the right-of-way then existed and the termi-

nals. He explained to me what he wanted, intimated what the compensation would be, and when I accepted requested me to mention several names of competent real estate experts of Minneapolis from whom or from which he could choose two other appraisers to work with me. I named these names and he selected Mr. Barney and Mr. Ridgeway. My instructions at this interview were somewhat vague and after I had notified Messrs. Barney and Ridgeway and they had accepted the task of appraising these properties we had our first meeting. Before anything was done and following a discussion as to what we were to do, I called at Mr. Woodman's office for further and more definite instructions. In brief, the instructions were that we were to examine the land upon which the present right-of-way and present terminals of some six or eight roads in the city of Minneapolis existed, and place a fair valuation on such land. That was substantially the instructions that I had.

Q. What intimation was given to you, if any, with regard to the purpose for which this valuation was to be made?

A. There was no intimation whatever.

Q. What intimation, if any, was given to you as to whether it was desirable on the part of the railway companies to have a high or a low valuation?

A. There was no intimation of that kind whatever.

Q. What intimation had you at any time before you completed and reported upon the valuation which you made?

A. From him?

Q. Yes, or railroad—

A. None whatever.

Q. From anybody?

A. From nobody connected with the railroad companies.

Q. Was the question of rates or rate-making mentioned to you at all—

A. No, sir.

Q. —with regard to the transaction?

A. No, sir.

Blueprint plats produced and marked for identification Complainant's Ex. 14-Elwood, and Complainant's Ex. 14-A-Elwood.

Q. I call your attention to two plats which have been marked, respectively, Complainant's Ex. 14-Elwood and Complainant's Ex. 14-A-Elwood; one is headed or entitled, "Map showing Great Northern Railway and property, West Minneapolis," and the other "Map showing Great Northern Railway and property, East Minneapolis." I ask you if these are replicas or substantially the same as maps which were at that time delivered to you and portraying the Great Northern properties within the limits of the city of Minneapolis.

A. They are, or practically so; I cannot remember exactly.

Q. They are substantially the same?

A. They are substantially the same; as I remember the location of the Great Northern property, these maps show that that is the property that we appraised.

Q. Now, will you not state the method that you and your associates followed in making this appraisal?

A. As I stated before, there were some eight different railroad companies who furnished us plats of their Minneapolis properties; I cannot recall which road we took up first, but we took up one of the roads so submitted to us, and first either together or singly inspected the properties of this particular road; we then met and discussed the knowledge which we each of us had or the opinion which each of us had or the estimate of what it would cost to purchase the lands shown on the plat so submitted to us.

Q. If they were not occupied and improved for railway purposes?

A. No, it was the land that was then occupied by these rights-of-way and terminals; our instructions were to appraise the land.

Q. Without regard to the improvements?

A. To divest our minds of there being any improvements. It was, however, in one case, a narrow strip of land which was used at the time as right-of-way and larger tracts of land, mostly central, which were used as terminals. We were to appraise that land irrespective of what was on it. After discussion—I do not think we made any figures the first or even the second meeting—we finally reached conclusions that we all agreed upon, and subdivided the lands as shown on these plats into different subdivisions, each subdivision having a value as near equal as we possibly could make it. We then appraised—

Q. That is, each subdivision containing land of as nearly—

A. Each subdivision containing land of similar value. In some cases we would make these subdivisions quite short, and in other cases, where the conditions and the values were substantially equal, we made longer subdivisions. We then placed on each of these subdivisions, after agreement among ourselves, the agreed appraisal or estimate, computed in square feet—we were not furnished with the area in any case—but gave our values at so much per square foot, on each of these subdivisions, not marking them on a plat, but marking, and which were later formulated into a report to these different railroads, the reports all being handed to Mr. Woodman. We then took up another road, and so through until we had finished them all. We then made comparisons of the different valuations, and where it appeared that we might have erred we reconciled the valuations that did not seem to be consistent with each other and then made our final report. In each case we inspected the property, except in such cases where we were absolutely familiar with the property. I do not mean to state that we went over all these rights-of-way or all of these terminals, but gave such careful inspection as we thought was necessary to inform ourselves as to the topographical, at least, condition of

the property to be appraised.

Q. What different course did you pursue to that which has been customarily pursued by you in performing your functions as a member of the board of appraisal of the real estate exchange or committee of appraisal?

A. None that I can recall.

Q. What different elements did you take into consideration than you have customarily taken into consideration in making such a valuation?

A. I do not recall as we ever made any such valuations before this time.

Q. No, I mean when making a valuation of property for—

A. Oh, the same; all the elements that we would take into consideration in the appraisal or valuation of any real estate, with possibly the added element of the value based on what it would cost to acquire it, of in one instance a narrow strip of land of considerable length running in a straight line or nearly so, and the value of a larger tract of land contiguous which could be used for a purpose which other property which we have appraised could not be used; that is, we used all the elements that we would ordinarily and generally use in the appraisal of property with this added element.

Q. That is, availability for a railroad purpose?

A. Railroad use, undoubtedly, railroad use, or any other use that it could be put to, although there is no other use we can think of that a narrow strip of land could be used except for a railroad use.

Q. To what extent, if any, did you take into consideration the value of contiguous lands as indicated by the prices paid for them in recent transactions of sale?

A. That was one of the elements that we took into consideration, an element which when used by a person who understands the other conditions surrounding and underlying it, is of value, an element of little or no value unless you are

posted as to the conditions that govern those particular sales. What I mean is that the value of property as shown by the recorded sales on certain streets, unless you know that that street has or has not a sewer, has or has not a water-main, curbing and gutter, paving, water—without a knowledge of these facts and a knowledge of other conditions, that element would enter but little into our determination, but with the knowledge of these facts it would be an element in our valuation.

Q. Upon completion of your work did you make and transmit a report showing the valuation put upon these properties by yourself and your associates? Did you and your associates make the report?

A. We did.

Q. I hand you what has been marked Complainant's Ex. 15—Elwood, and ask you if that is the report or a copy of it.

A. This is the report.

Q. And what has been marked is a blue-print copy of it?

A. Yes. This is the report that we made and signed.

Mr. HOW: It is conceded that this blueprint is a copy, I take it?

Mr. O'BRIEN: Yes, sir.

Q. This report was made as of what date?

A. It is not dated, but it was in the fall and winter of 1906-7, as I recall it.

Q. What with respect to your best judgment—that of you and your associates—did this report when made represent with regard to the valuations of the properties covered by it?

A. That report represented what lands described therein and in the shape as shown on the plats given us were worth, based on what it would cost to acquire or purchase those lands at the time we made the appraisal; that cost of acquiring or purchase being for the lands alone, assuming that there were no improvements, railroad or otherwise, on the property or on the land so appraised.

Q. Did you make your valuation upon the proposition that a railway company was to buy the lands, or upon the proposition that any purchaser who wanted to buy those lands in that shape would have to pay at least that figure for them?

A. It was a natural assumption on our part that lands in that shape would be available and more available for railroad purposes than for any other; that was an element that entered into our appraisal,—the fact that the land could be so used.

Q. Well, did you add anything to your valuation on account of the fact that the lands were used at the time you made the appraisal for railway purposes?

A. No, sir; we were not asked to do that; that was for some one else to do. We were asked to appraise and report what it would cost to acquire these certain lands on the assumption that there was no improvements whatsoever on said lands, railroad or otherwise.

Q. Since that report was made and transmitted, has there been any time when in your opinion, if you had been called upon to make the valuation, you would have made it less than that shown in your report?

A. No, sir; there has not been, not in the aggregate; there might be one or two small instances which would not cut any figure, but in the aggregate there would be nothing that would change our report in that direction.

Q. You have given some considerable consideration to this valuation and to the figures contained in it since the report was transmitted and made?

A. Yes, sir.

Q. And that consideration has been aimed at the question whether your valuation is a justifiable one?

A. Yes, sir.

Q. Now, I ask you what is your judgment at the present time with regard to the reasonableness and propriety of that valuation.

A. My judgment, based on such consideration, and additional investigation which I have made, leads me to the positive opinion that if any error was made in our appraisal it was the error of appraising the properties too low rather than too high at the time the appraisals were made. There have been some changed conditions since then.

Q. You have kept track of all transactions with regard to continguous property to any of this property which you have appraised since the time of the appraisal?

A. Yes, sir; that is first, in the nature of our business we do that, and second, the question has been of enough interest to me to give an added reason why I have tried to keep track of all transactions and sales that would bear out or sustain or confirm the valuations which I had made.

Q. What transactions have you known of since that report was made, which, in your opinion, serve to cast discredit upon your valuations or any part of them?

A. None whatever.

Q. Have you in mind any particular transactions the nature of which in your opinion serves to justify you in your statement that the valuations are moderate or low?

A. I have.

Q. Will you not state one or two, without unnecessary detail, in your own way?

A. Aside from the property which is known as the Union Station property and which we appraised at $5 per square foot, the next highest property or the next highest appraisal of the Great Northern road is the property from First street north to Seventh street north along or about along the line of Fourth avenue north, as shown on the plats. That property was appraised at $3.50 per square foot. On or about this time—in fact, prior to this time, but the information which I now have I did not at that time have—Mr. T. B. Walker, of Minneapolis, made a lease to Butler Brothers of a tract of land; the terms

of the lease although expressed in a rental charge of so much per square foot of the building which was erected by Mr. Walker, was based by him on the then value of the land and the estimated cost of the building. This land was situate on Sixth street between Second avenue north and First avenue north, a tract of land 330 feet long by 170 feet wide; at the time it was improved with some old buildings and the remnants of the old baseball park—no buildings on it of any value. This land is, in my opinion, of about the same value as the average of the tract that I name occupied by the Great Northern terminals or right-of-way and situate about two blocks from it. On the basis of $200,000 upon which the lease was made, it would figure at the rate of $3.62 a square foot.

Q. And what does your appraisal show for this property of the Great Northern?

A. $3.50.

Q. That is upon the property of the Great Northern within two blocks of it and nearest to it?

A. Yes, sir. There was another sale right near there—

Mr. O'BRIEN: Won't you locate that Butler Brothers property,—by the West hotel?

Q. How near is it to the West hotel?

A. The West hotel is on Hennepin avenue and Fifth street. To go from the West hôtel to Butler Brothers you would go one block; that is, to the first part of the Butler Brothers building; you would go one block to First avenue north, and then one block to Sixth street and across the street and you would reach Butler Brothers, and three blocks more you would reach the Great Northern right-of-way.

Mr. O'BRIEN: Now will you locate it with reference to the street-car loop, the interurban?

WITNESS: No, sir, the street-car loop goes up First avenue north to Fifth street only, it doesn't go by the Butler Brothers. About this time Mr. Walter Heffelfinger sold to Mr. Bovey, who

built a wholesale grocery house thereon for his son-in-law, a tract of land seventy feet on Second avenue by seventy-seven feet on Fifth street. This tract in its entirety is nearer the Great Northern tract than the first named, the Butlers'. This property was unoccupied except with an old building, which was given to a wrecker to remove. There are 5,390 square feet in this property, and the price paid was $3.80 a square foot. I saw Mr. Heffelfinger yesterday, who owns the adjoining property, and he stated that he had received offers considerably in excess of what he had received for this property and had refused them, on the balance of his property in this same block. I am interested in a small way, first I negotiated a mortgage loan and second, I have a small interest in the property, in a piece of property on First avenue north and Washington known as the old Windsor hotel property.

Q. How far is that from any Great Northern property which you appraised?

A. In one direction it is two blocks and a half, and in another direction a little less than three blocks. This property is 66x157; a lease of same for twenty-five years has been closed and signed, and the buildings are now being wrecked on the lot in question, the lease providing for a rental of five per cent on a valuation of $84,000, which would be at the rate of $11 per square foot.

Q. And what is the valuation of the nearest Great Northern property?

A. I think the nearest Great Northern property would be the Fourth avenue north, which would be $3.50, although it is about equidistant from the so-called union station property, appraised at $5 per square foot, but there had been property sold nearer the union station than this. The city of Minneapolis has acquired the tract of land bounded by Nicollet and Hennepin, Second street and Washington, the nearest part of which is two blocks from the union station, for a park called

the Gateway park; this property was appraised by commissioners appointed by the court, the law requiring that these commissioners should live outside of the ward in which the property was located, and it was so appraised at $472,000. After it was appraised the park board employed Mr. Frank G. McMillan (ex-Senator McMillan), a contractor, one of the leading contractors in Minneapolis, to give them a written appraisal of the buildings on this land. This appraisal was $98,000. Later, in the purchase of these properties the park board were obliged to pay a greater sum than the properties were appraised at. They have bought all of the properties now but one or two small tracts, at an increased cost, ranging from ten to fifteen per cent. There are in this tract 36 300 square feet. Deducting the valuation on the buildings made by Mr. McMillan of $98,000, which buildings will be absolutely valueless to the park board (they cannot be wrecked and anything of any considerable amount obtained from them as wreckage) would leave the amount paid by the park board for the land alone $11 per square foot.

Q. As compared with $5 per square foot which you and your associates placed upon the nearest Great Northern property?

A. Yes, sir. The postoffice department (or rather the United States government) acquired block 40 by purchase, not by condemnation. Block 40 is situated between Washington and Second street, and Second and Third avenues south. This is also about two blocks or two and a half from the Great Northern property right-of-way, possibly three blocks or four blocks from the union station. The particulars or the history of this purchase is as follows: The citizens of Minneapolis were apprised that the government would pay $350,000 for a site for a postoffice; the requirements on the part of the government being that they should purchase an entire block, that it should not exceed that cost to the government, and that it should be

located within convenient distance of the railway passenger stations of Minneapolis. There were some half dozen blocks offered to the committee who had the matter in charge, and the choice finally fell on block 40, the owners of which in most every instance were desirous of selling and selling in a competitive market. $350,000 was not sufficient to buy the block. The citizens raised an additional sum and took from the government as part pay or possibly full pay the buildings and the rentals of the buildings until such time as the government might need the property; so that the price which the government paid represented not more than the cost of the land. The buildings are of little value; they are old buildings, been there for years. On the basis of $350,000, bought, as I stated before, in open competition, would figure up $3.42 a square foot. There are 102,300 square feet. The correction of my computation can be gone into later. There are other small sales that bear these figures out.

Q. Well, let me ask what property of the Great Northern that you appraised is nearest this property which you have last described.

A. The property shown on the plat and in our report as lying between Second street north and Second avenue south, appraised at $5 per square foot. I beg your pardon, the nearest property as this lies between Second and Third avenue, is the property lying between Second avenue south and Sixth avenue south.

Q. And what did you appraise that at?

A. $2.50 per square foot.

Q. How do these prices and these values shown by these transactions which you have specifically named and described compare with prices for contiguous property and values of contiguous property which you had in mind at the time you made this report? Are they higher or lower than values were generally supposed to be at that time in that vicinity?

A. They are higher, as I think I stated that the consideration and the investigation which I have made since these reports were turned in, convince me that our valuations, if they erred, erred on the side of being too low, and had I been or had our committee been as well informed at that time as two years of consideration and investigation have made us informed at this time, our valuations would have been somewhat higher, irrespective of the increase in values since the time the appraisals were made.

Q. Irrespective of that?

A. Irrespective of that.

Q. Where is Mr. Barney, do you know?

A. Mr. Barney is in California.

Q. Do you know when he will return?

A. In about a week, I understand.

Q. Do you know where Mr. Ridgeway is?

A. Mr. Ridgeway has just returned from the South; he is in Minneapolis.

Q. He has returned, has he?

A. He has returned, within a few days.

Q. Have you any familiarity with what perhaps may be called the Morgan method of valuing real estate, upon an assessment basis, the relation which assessments bear to the sales prices and therefore to values?

A. I have heard of the method; I think I understand what his method is.

Q. Do you ever, in making estimates of the value of property, take into consideration the assessed value, as a basic element?

A. No, sir.

Q. Do you take it into consideration at all?

A. None whatever.

Q. Does your experience in making valuations lead you to believe that you can take assessed valuation into consideration

for the purpose of making a proper valuation?

A. You cannot under existing conditions, speaking of the assessed valuation for Minneapolis. The conditions I understand are the same in St. Paul. They cannot be taken into consideration by any thoughtful man who wishes to arrive at a just value of real estate. The assessed valuations of Minneapolis and St. Paul are made, as a rule, by political henchmen who have little or no knowledge of values; they neither have knowledge nor do they have the funds or the help furnished them that would make a consistent valuation or one that was of any value. In brief, the assessed valuation of the cities of Minneapolis and St. Paul, both real and personal, outside of the centre of Minneapolis and possibly St. Paul, is in the nature of a farce—nothing better.

Q. It is notoriously worse in St. Paul even than it is in Minneapolis, is it not?

A. I think so; it is my opinion that it is so; I think St. Paul admits that. I have been called in conference by St. Paul people to discuss that question during the past three or four years, and that has been the opinion of both the St. Paul and Minneapolis men that met in this conference, that both assessments were bad and that St. Paul's was worse.

Q. Have you had any experience in buying right-of-way for railway uses at any time?

A. I have.

Q. Have you had any recent experience in that regard?

A. Yes, sir.

Q. If in your judgment it will throw light upon your valuations and the justification for them, I wish you would tell what that experience has been.

A. I think it should throw some light, it did shed some light on myself. I have been purchasing for the past two years a right-of-way for the so-called new passenger line or entrance into Minneapolis for the Northern Pacific road; I understand

the Great Nortern will also use this same passenger line. This land so purchased lies between the river on the east side of the Mississippi from a point about at the intersection of Seventh avenue northeast and the river and Eighteenth avenue northeast, a distance of possibly three-quarters of a mile. I was employed by the Northern Pacific to buy that land, buying a strip in a straight line, absoutely straight, one hundred feet wide, which was afterwards increased to one hundred and twenty-five feet wide. I am still engaged in that purchase. We have either bought all of the land required or made offers for all the land required. In other words, we bought land at a cost of upwards of $175,000, and have made offers for the balance of the land, which offers have been refused, and I am now negotiating, at higher figures, said offers amounting in the aggregate to $200,000, making a total cost of this right-of-way, assuming that the offers will be accepted—which they will not be—of $375,000; which, figured in square feet, would make a cost (of course including all improvements) of about 80 cents per square foot. The improvements, as can be shown, are of value not exceeding two-fifths of that sum. This sum of $375,000 does not include the damages which the Northern Pacific may have to pay and which the property owners expect the Northern Pacific to pay for passing in front of their property along certain streets or diagonally across streets.

Q. Merely for the land you purchased?

A. Merely for the land and the improvements thereon. Estimating (and I have carefully done so) the value of the buildings, would leave the cost of this land 55 cents per square foot, assuming that I succeeded in purchasing the property at the offers made and which have been refused, or assuming that it will not cost us to exceed that if we condemn in place of further negotiations, which we will have to do in certain cases.

Q. And your offers are still in force?

A. Offers are still in force.

Q. Now, with what land appraised by you does that property compare in your judgment?

A. To the land shown on sheet 3, described as from Spring street to Van Buren street, at 30 cents per square foot, and from Van Buren street to Nineteenth avenue northeast, at 25 cents per square foot.

Q. That is on sheet 2 of the exhibit as it is offered.

A. Now, relatively, if I may state the same, the appraisal of the Northern Pacific property which was made on the same basis and at the same time as this Great Northern property, was on property that could be more closely compared with this than the Great Northern, as it was near it.

Q. What did you estimate the Northern Pacific property in question?

A. This property that I have mentioned as buying for a passenger line for the Northern Pacific road, extended from Seventh avenue northeast to Eighteenth avenue northeast. We appraised property in a similar location for the Northern Pacific, running from Eighth avenue to Fourteenth avenue north, at 30 cents per square foot, and from Fourteenth avenue north to Nineteenth avenue north, at 20 cents per square foot.

Q. As compared with 55 cents which you have actually had to pay?

A. 55 that we have actually had to pay—and may have to pay more.

Q. What was your experience in the acquisition of that property—were you able to keep yourselves under cover as to the purpose for which you desired this property?

A. For a certain time.

Q. What was the effect upon prices when you had to come out from under cover or were fetched out?

A. The prices that we had to pay, and the prices that the properties were fairly worth to the owners, when the knowledge that this road was going through was acquired, was

greater, considerably greater. I might state, in that connection, that before coming out from cover it is much more difficult, and attended with much greater cost, to buy a strip of property in a straight line, even though the parties from whom we purchase have no knowledge that a railroad or some other corporation is going to require or necessarily have to have the property. Not one owner in six of ordinary residence property has his property on the market or desires to sell, and in purchasing and being obliged to purchase that ordinary property and not being able to substitute other property which is offered in competition, you have to meet the views of these unwilling sellers at prices much in excess of what would be shown under Mr. Morgan's system of properties that might have sold, in isolated cases, on each side of the tract. You can't fill the order to buy a narrow strip of land and avail yourselves by running in a zigzag way through properties that are on the market and are offered either at the market price or under the market price; so that before you come out from under cover you have to pay an amount over and above what ordinarily you would have to pay, and when it is known that the other property not purchased has another use, when it becomes known to the owners of that property that there is another use than they know of that that property can be put to, they not only ask a greater price but are in my opinion entitled to a greater price.

Q. I take it that it is somewhat notorious that a large part of the transactions during the last ten or fifteen years, both in St. Paul and Minneapolis, have been in the nature of forced sales, people desirous of getting rid of property; is that the fact?

A. I think that statement is a little too broad.

Q. Is too broad.

A. Yes. I would say a large amount of property in the two cities, and a large part of the property sold at certain periods during the past ten years, were forced sales. At the

present time in Minneapolis—and I understand it is true in St. Paul—there is a pretty good market for real estate.

Q. And I take it that you consider that there is a distinction between the forced sale and the forced purchase, so to speak?

A. Decidedly.

Q. And that there is a marked impression upon the value which the property will bring in the market dependent upon circumstances of that kind?

A. Decidedly so.

CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. Neither a forced sale nor a forced purchase is evidence of true value?

A. No, sir.

Q. Every purchase by a railroad company, so far as you know, is a forced purchase?

A. I would qualify my answer to your first question to this extent, that while ordinarily a forced sale or forced purchase does not represent the value, in the case of railroad right-of-way where you are obliged to purchase in a straight line and are therefore forced to purchase, it is an element that enters into the value of a tract, and that is the reason it makes that tract more valuable than if that condition did not exist.

Q. Now, most of this property that you have been appraising in Minneapolis formed part of the right-of-way of the old St. Paul & Pacific?

A. I don't know as to that, Mr. O'Brien; I have no knowledge of that fact.

Q. When did you come to Minnesota?

A. 1875.

Q. Well, it was after that that the St. Paul, Minneapolis & Manitoba Company was organized.

A. Oh, when I came to Minneapolis they had simply a streak of rust through the city, they didn't have any such terminals or any such right-of-way as they have got now.

Q. Do you know—

A. Yes.

Q. —that it is what formerly had belonged to the right-of-way of the old St. Paul & Pacific?

A. No, I can't particularize, but I know as a fact as a general proposition that the terminals and the right-of-way of the old St. Paul & Pacific were very small and inconsequential compared to the terminals and right-of-way they have now.

Q. So that all of these present terminals have been practically purchased since 1874?

A. Undoubtedly so. I do not know as to that, but that is my opinion.

Q. Do you know what they cost?

A. I have no knowledge.

Q. You didn't make any examination of the records for the purpose of ascertaining that?

A. No, sir,—I never do when I appraise property.

Q. You have valued them now upon the theory of present acquisition?

A. I have valued them on the basis of what it would cost to acquire these particular tracts of land were there no railroads or improvements on said lands.

Q. And upon the theory that the other surrounding property was improved and used as it is at present?

A. Yes, sir.

Q. And every other condition the same?

A. Every other condition the same, yes, sir.

Q. And in arriving at that conclusion you took into consideration no element of value that you did not think existed?

A. No.

Q. And you omitted no element which you thought did add

to the value upon that basis?

A. No, sir.

Q. So that, instead of ascertaining the value of the lands as lands upon the market, you determined what it would cost the Great Northern road to acquire those lands at this time in their present shape, present condition, and in view of the present value of surrounding lands?

A. Not the Great Northern road—what it would cost any one to acquire it. I don't know what you mean by "present conditions," but with present conditions of the surrounding property the same and with this particular property as appraised absolutely bare and naked.

Q. Well, you think that the value of the surrounding property is an important consideration?

A. It is one of the elements and one of the factors taken in connection with the conditions surrounding these other properties.

Q. But you don't think that when you arrive at the value of the surrounding property you arrive at the value of the railroad property?

A. Only as an element in determining value.

Q. I say you don't think that the value of the surrounding property is equal to the value of the railroad property?

A. If the surrounding property is in the same shape as this it would be the same.

Q. Is it?

A. In some instances it is and in some it is not.

Q. The whole length?

A. No, sir.

Q. Then it is not in the same shape?

A. What is not in the same shape?

Q. Surrounding property.

A. Not all of it. Some of it is and some is not. The property that is in the same shape is of the same value.

Q. Do you think that the surrounding property is in the same condition and shape as the railroad property, in the city of Minneapolis?

A. There is some of the surrounding property that is similar and in the same shape. The Great Northern and the Northern Pacific run, for six or eight blocks, side by side, and the value of each tract is the same.

Q. That is the exception, isn't it?

A. No, it is not the exception; there are other properties similar: The Minneapolis & St. Louis runs along the Great Northern tracks, along Fourth avenue north—and if I had my map here I could probably show other instances—I know it is so, that there are a number of properties where the right-of-way and the Omaha terminals, the Northern Pacific terminals and the Soo terminals are all nearly adjacent.

Q. Now, have you any objections to saying frankly whether you considered the adjacent property as affording a test or not? You have given us a lot of instances—what are you arguing about?

A. I am not arguing, I am answering your questions.

Q. They were not of surrounding property. Did you do that as an evidence of the value?

A. As one of the elements that entered into it.

Q. Now, to what etxent?

A. It is hard to tell. Do you mean per cent?

Q. Yes.

A. I can't tell you.

Q. Then do you expect the Master here to be able to determine, from the instances you have given, as to what the value is?

A. I was giving those instances to show one or more of the elements that entered into my computations and consideration in appraising this property.

Q. You did take into consideration the value of contiguous

property not held by railroad companies, then?

A. I did

Q. All along the entire line of the right-of-way?

A. At different sections; I can't say foot by foot or lot by lot.

Q. But in general?

A. In general, most assuredly; that was one of the elements.

Q. Did you conclude that the railroad property as a rule was of greater value than the contiguous property?

A. We had nothing to do with the railroad property. We were simply appraising the land upon which that railroad existed.

Q. When I speak of railroad property I mean the railroad land; you didn't understand me.

A. What was the question?

Q. Of course I didn't suppose you were valuing a locomotive in listening to you all the morning. Now, in appraising the railroad lands which you did appraise to which you have testified here, did you come to the conclusion that they were worth more or less than the contiguous property not held by railroads?

A. More, considerably more than the contiguous property.

Q. Because they were used for railroad right-of-way?

A. No, because they could be put to that use. They were not used as railroad right-of-way; we were asked to divest our minds of that entirely when we appraised that land; it was because they could be used as a railway right-of-way that we put that value.

Q. Then because those lands were available as a railroad right-of-way—

A. Yes, sir, available and adaptable for that purpose.

Q. And adaptable for that purpose?

A. Yes, sir.

Q. And being so adaptable, and that being their highest

use, you assumed that they would be acquired for that use?

A. I assumed if acquired in that shape it would be used for that purpose.

Q. Did you assume that they would be acquired in that shape?

A. I assumed that they had been acquired in that shape. We were furnished plats showing that land in that shape, acquired or otherwise. It was that land in that shape that we appraised.

Q. Then you have got down to the facts again; you were not fully laying the facts when you eliminated the railroad, but now having got beyond that point you come back to the fact again that the lands had been acquired in that particular shape; is that it?

A. I assumed that when the Great Northern furnished us those plats showing those lands in that shape that they had acquired it, common sense would tell me that.

Q. So that satisfied you that they must be considered with reference to their value in the shape in which they were?

A. Certainly.

Q. Now, at that point you again strayed away from the facts and assumed that the Company would have to purchase them at this time,—this was when you flew to the other—

A. I made no assumption.

Mr. How: "Strayed away" from what facts?

WITNESS: I made no assumption that the Company would have to buy them or sell them. I was simply asked to appraise that land as shown on those plats and I did so.

Q. Didn't you value them upon the assumption that the Company would have to pay so much for them at this time?

A. That company or some other company. If I had those lands I would expect to be able to sell them at that price or better.

Q. Didn't you assume in doing that that they would pay

more for them because they would have to buy them in a particular shape?

A. Certainly they would pay more.

Q. And didn't you assume that because it was a railway company they would have to pay more?

A. Because it was a railway company?

Q. Yes.

A. The inference would only be that a railroad company would be the only company that could use lands in that shape, not because they were a railroad company.

Q. But the assumption would be that as railroad companies always do so railroad companies always will have to pay a little more than the ordinary purchaser?

A. No, sir, an ordinary purchaser, no matter whether it was a railroad or a brewery or a warehouse, that attempted to buy a long strip of land and it was known that they absolutely had to have that strip of land, would have to pay as great a sum, whether they were called a railroad or called something else.

Q. Well, there is no other buyer except the very few buyers who require a right-of-way that do purchase a strip of land in that way?.

A. Certainly; and it is fair to assume that when property is so bought it is being bought for a railway.

Q. So we won't quarrel about that, as to whether it would be a railway that would be the purchaser that would have to take it in that particular shape, but you did assume it was to be purchased presently and by a purchaser who had to have its property in just such a shape?

A. I made no such assumption, no, sir.

Q. Haven't you testified to that three or four times?

A. No, sir, I have made no such assumption. I have testified that the land in that shape was worth the sum of money that I placed upon it, not assuming that any particular rail-

road, this or any other, was going to buy it.

Q. Did you say it was worth more or that it would cost more to acquire it?

A. They are synonomous terms; a thing that costs more is worth more. That is the basis of values.

Q. Then cost is really what makes worth?

A. Of course there are exceptional conditions.

Q. You just said if it costs more it is worth more?

A. Why, yes, that is true.

Q. If it costs less it is worth less?

A. Yes, sir.

Q. Then "cost" and "worth" are synonomous, you think?

A. In a great many instances, yes, sir.

Q. And when you get the appraisals they are absolutely synonomous?

A. Yes, sir; if you "corner" the wheat market, that rule wouldn't apply.

Q. Well, now, we down here are not given to purchases of that sort, you will have to use illustrations that we are accustomed to.

A. I will try and simplify my illustrations if I have to.

Q. Now, there has been an effort made for many years to equalize real estate taxes, has there not?

A. Yes, sir.

Q. Your experience in this respect in dealing with public officers hardly justifies you in denouncing every assessor as a "political henchman," does it?

A. I have made no such statement. I said that—

Q. You did refer to "political henchmen" that you thought made the assessments.

A. I said in these two cities under present conditions the assessors that assessed these properties are made assessors through political ways rather than from any special fitness for the office. That is what I meant to say.

Q. The great evasions of taxation that have shocked everybody's sense of justice haven't been in the differences in real estate taxes, have they?

A. No, sir, it has been in personal property.

Q. They have been in the evasion of personal property taxes?

A. Yes, sir.

Q. By the very rich?

A. Yes, sir.

Q. And the truth is that the railroad companies of this state, upon the basis of your valuations and their own valuations of the cost of their property, have not paid more than a fifth or possibly a tenth as much as the ordinary real estate holder?

Mr. HOW: That is objected to as wholly improper and impertinent.

Mr. HOLDEN: Almost insulting.

Mr. HOW: If anybody can conceive of any good that an answer to that question yea or nay will do, I should be glad to be advised and be given an opportunity to withdraw the objection. Until they can, I submit that that question is impertinent, and I do think that we have had fully enough of that sort of thing without objection, and I believe it is my duty to object and free the record, if I can, of that sort of thing.

The MASTER: I think he may answer the question, if he can.

A. That is a matter of computation which I haven't made; neither have I seen it made, so I am not qualified to express an opinion, I do not know.

Q. And so far as you know the ordinary assessor and public officer in the state of Minnesota is disinterested?

A. No, I do not say that. I say that the ordinary assessor, appointed in the manner that they are appointed and have been appointed, in the city of Minneapolis, are not qualified, or well enough qualified, so that their valuations can be taken as the standard of values.

Q. They are disinterested are they not, so far as you know?

A. I know of none that are interested.

Q. Their work is reviewed by superior officers?

A. Well, if a committee composed of aldermen who themselves know no more about values than the assessor, they might be superior so far as the office is concerned but not superior in knowledge.

Q. You don't think that the efforts of individuals, each one paying some attention to his own assessment, has any effect on that matter?

A. There is no review. You have a different board here, but in Minneapolis we have what is called the county board of equalization. They do not review the assessments, they sit and listen to those who wish to have their assessments reduced; no one asks them to raise their assessments. Their duties consist (or that is their conception of their duties) in equalizing to the extent of decreasing or cutting off the assessments of those who complain that they are over-assessed. Later, the city council as a body passes and approves the assessment, but they don't examine the assessment rolls. There are 250,000 separate descriptions of real estate in the city of Minneapolis,—do you think that a committee appointed of the city council would review those assessments?

Q. And that work, which you have apparently so much contempt for, has been going on ever since real estate taxes have been levied in the state of Minnesota?

A. I don't speak of the entire state of Minnesota; I am only speaking from my own personal knowledge.

Q. Well, it has been going on ever since the cities of St. Paul and Minneapolis have been established?

A. In an increased ratio. When the cities were small it was easier to find men who were competent to make an assessment.

Q. I say the work has been going on more or less ever since

that time, ever since the taxes commenced to be assessed in these cities, badly or well, which ever it was?

A. Assessments have been made in Minnesota every two years on real estate and every year on personal property.

Q. Well, you don't think during all that time anything has been done which would enable one to determine an ordinary ratio between the assessed valuation of land and the selling price of land generally?

A. I didn't make that statement as broad as that. I am speaking only of such matters and such assessments as I have personal knowledge of.

Q. What is that?

A. I am only speaking of the assessments that come under my observation and of which I have personal knowledge. I know little of the state assessments at large, except in general.

Q. You, in this matter, in making this valuation, are acting as the employe of the railroad companies, you have a direct interest in this case?

A. I have no interest whatever in the assessment. I am employed by the railway company as an attorney is employed, to give an opinion, only to give an opinion.

Q. And you are in their employ for the purpose of acquiring these lands that you have described?

A. Yes, sir, I am employed by the Northern Pacific.

Q. So that as between yourself and the "political henchmen" that you spoke of you are much more interested than they are?

A. I am much more competent to appraise this property than the assessor.

Q. And have a much more direct interest in the matter.

(No answer.)

Q. Now, is it not true that in the city of Minneapolis the assessed value of lands in that city, throughout the entire city, is about 58½ per cent of the average selling price of the lands for the past five years?

A. I have heard that there have been computations and investigations made (I think by the tax commission) which purported to show that the assessed valuation of Minneapolis bore to its actual value, taking the entire city, 53 per cent.

Q. 53 per cent?

A. Yes.

Q. Not 58½?

A. I understood so.

Q. Do you know whether that statement is borne out by the facts or not?

A. It is not borne out by the facts that have come to my attention; in fact, it is far from being borne out. I have not made any computations, but I know of individual cases. Let me state, Mr. O'Brien, if I may,—

Q. Nobody claimed that it was a uniform condition, did they?

A. No, nor the tax commission did not.

Q. Then an individual case would neither prove nor disprove the general statement?

A. I should think it would have a tendency to prove it.

Q. An individual case?

A. A number of individual cases would have a tendency to prove the inaccuracy.

Q. Do you know, as a matter of fact, what the ratio has been along the right-of-way of the Great Northern road in the city of Minneapolis in property on each side of the road extending for say a quarter of a mile from the center line of the right-of-way, the pro rata ratio of the assessment to the purported value of the property, to the purported selling price of contiguous property?

A. No, sir, I do not. I do not think it is possible to get any data of that character that would be of any value in determining the—

Q. I didn't ask you your opinion as to whether it would

be of any value or not. There are some matters in which your opinion hasn't been asked yet in this matter, and as to the value of the testimony offered by the State we will still consult our own judgment on that. Now you don't know what the fact is, do you?

A. The fact of the ratio?

Q. Yes.

A. Obtained by whom?

Q. Do you know the fact—

A. I do not know any fact about any ratio.

Q. You don't know, as a matter of fact, what the assessed value of the land for a quarter of a mile on each side of the right-of-way of the Great Northern in the city of Minneapolis—

A. I never owned any of the property and therefore had no occasion to know.

Q. —bears to the selling price for the same class of property for the last five years?

A. No, sir; I do not even know the assessed value.

Q. Don't know the assessed value?

A. No, sir.

Q. Can you give any reason why the right-of-way of the Great Northern road is of greater value than a strip of land of equal width immediately adjacent to it?

A. No, sir; a strip of land of equal width running next to and parallel with the Great Northern right-of-way would have the same value.

Q. Do you mean it would have the same value if it constituted a continuous tract, or that an equal area held by different owners contiguous to it would have the same value?

A. I mean a strip of land of equal width and of some considerable length; not a strip of land next to and of only a few rods in length.

Q. Then why is it, Mr. Elwood, that in valuing this particular right-of-way of the Great Northern Railway you have

valued it as much higher per square foot than the contiguous property?

A. For the reasons that I have stated, that a strip of land similar to this right of way of the Great Northern road is worth more as a strip, because it can be put to other and more advantageous uses, greater uses, higher uses, than the lands which adjoin it of similar shape and character.

Q. But you have assumed that the railroad company isn't there, that it isn't used for that purpose?

A. I assume that it can be used for that purpose.

Q. Well, you have assumed that it is not used for that purpose, haven't you?

A. When I made the valuation I was to value that land on the assumption that it was not used for any other purpose but was a strip of land of the character as shown on the plats.

Q. Which would be used for railroad purposes?

A. Which would or could be used for railroad purposes.

Q. And that the cost of acquiring it would be greatly above the normal value of the land?

A. Adjoining, yes, sir.

Q. Then, Mr. Elwood, you haven't valued each division of the Great Northern right-of-way in the city of Minneapolis at its ordinary normal value as land for ordinary, normal purposes—wait a minute—but have valued that land above the normal value of lands because it would of necessity be purchsed by a railroad company at an excessive price?

A. I have valued that property at its normal value for normal or ordinary uses, plus its value in the shape it is and in the condition it is and from the fact that it can be used, advantageously used, in that shape.

Q. Yes, and plus the cost of acquiring for that purpose—railroad purpose?

A. Not plus the cost of acquiring for a railroad purpose, but plus the cost of buying that property.

Q. For railroad purposes?

A. Or any other purpose—the strip of land.

Q. For railroad purposes, right-of-way purposes?

A. It would be worth no more for railroad or right-of-way purposes than for any other purpose.

Q. It wouldn't be worth anything in that shape for farming purposes?

A. No, sir, it would not.

Q. Or for residence purposes?

A. It would be worth something, but that is only a small factor.

Q. Or for park purposes?

A. No, sir.

Q. Then it was upon the assumption that it would be acquired in that shape by a railroad company for railroad purposes at the excessive price which you say railroad companies are compelled to pay?

Mr. HOW: That is objected to as not stating the fact. He has not said anything about any excessive price. His testimony is that it is a fair price and that the owner is entitled to it.

WITNESS: I haven't said it and I won't say it.

Q. Is that the case?

A. Yes, sir, I haven't made any such statement; neither will I make such a statement, because that is not true.

Q. Haven't you just said that you added to the normal price of the lands the price that the purchaser would be compelled to pay for it in that shape if it was acquired presently?

A. If you mean by the normal condition the condition of the land or the use it could be made of for cutting up into smaller tracts—if that is what you mean by its normal use, I would state that plus its value in that shape must be added an added value for being in the shape that it is and making it available and adaptable for the purpose for which it can be

used, which is railroad purposes or any other purpose that requires a straight line through a given city or country.

Q. And in order to get a strip of land in that shape, do you not say that an excessive price must be paid for the individual tracts acquired to make up the whole?

A. I do not say an excessive price, I say a greater price.

Q. Very well, you say a greater price—

A. Yes, sir.

Q. —than it is, over and above the real value of the land?

A. No, sir; that makes its real value.

Q. It is over and above the real value of the land as it was in its original shape?

A. The real value of the land for other purposes, but the real value of property is based on what it can be most and best used for.

Q. Then there is no such thing as an excessive price?

A. Oh, yes,—I have paid excessive prices many times for property, what I considered excessive.

Mr. HOW: Sold them, I hope, too?

WITNESS: Tried to.

Q. Now, after you had disposed of and eliminated the Great Northern road, what convinced you that you were justified in assuming that this tract of land would be immediately required for right-of-way?

Mr. HOW: That is objected to because there is no such assumption.

The MASTER: He may answer if he can.

A. I did not so assume. I assumed it could be used for that purpose but I did not assume it was required or would be required for railroad purposes.

Q. Well, is there anything peculiar about the formation of the soil included within the right-of-way which makes it available for right-of-way—

A. No, sir.

Q. —that is not in the other property?

A. No, sir.

Q. Why couldn't you assume that of the property immediately contiguous?

A. It could be.

Q. Then its value is the same, is it?

A. If you had it in that shape, but the land next to it is owned by different owners and is not in a straight continuous strip, and to acquire it you would have to pay and it would cost you a sum equal to the cost I put upon that.

Q. Now, why would it cost you more to acquire property as a right-of-way than it would cost you to acquire an equal area in any shape?

A. It wouldn't cost any more to acquire as a right-of-way than it would to acquire for any other purpose except for the assumption on the part of the sellers that if you were buying a long strip of land in a straight line it necessarily was for a right-of-way.

Q. Do you think the sellers would assume that?

A. Naturally. Wouldn't you?

Q. And you think that would cause them to enhance the price?

A. It would enhance the price.

Q. And in some cases it would not only enhance the price so as to include every element of proper value but it would enable some owners to obtain an excessive price, would it not?

A. No, sir, the party acquiring that property, if it is a railroad, has the right to condemn, and having that right they are not obliged to pay an excessive price unless a jury so states.

Q. And you would accept the judgment of the jury upon that point?

A. I would have to.

Q. And you do accept it mentally now?

A. As correct?

Q. Yes.

A. That is a hypothetical question; I don't know what the jury would decide.

Q. I want to understand your terms—

A. I didn't make the distinction, Mr. O'Brien.

Q. —I want to know whether or not you claim there is no such thing as an excessive price.

A. May I explain what I mean?

Q. Is that your statement?

A. No, sir.

Mr. How: Will you permit him to explain it?

Mr. O'BRIEN: No. I am conducting the examination, if you please, Mr. How.

Q. No matter whether the price is one exacted by the owner from the corporation under peculiar circumstances, whether it is a price fixed by condemnation commissioners or by a jury, the price, you say, is the evidence of the value of the land and is not excessive?

A. It is not the evidence of its exact value. The term excessive, you and I—

Q. Is it excessive?

A. We may not agree on the term, Mr. O'Brien.

Mr. How: Now, may I submit that the witness is entitled to make an answer and not be badgered?

The MASTER: Yes, let him make his answer.

WITNESS: I would make this distinction: If I, as the owner of that building, the St. Paul Fire & Marine, felt obliged, for the safety of the building, to buy ten feet adjoining it and I had not the right to condemn but had to have that property, I might be obliged to pay ten times its value and therefore pay an excessive price. I hold that a railroad in buying right of way and terminals are protected against it; they may sometimes have to pay a price which is possibly greater than its actual value but not necessarily excessive. That is the dis-

tinction I would make in my understanding of the word excessive.

Q. You mean to say too large but not excessive?

A. Well—

Q. Now using the term excessive as meaning more than the real value, do you say that you have included that additional price which a railroad has to pay?

A. There is always a fair difference of opinion as to the real value of most any commodity,—it might seem greater than I thought it was worth and not greater than what an expert equally well quaified would think it was worth.

Q. Have you any objection to answering my question now?

The last question was read to the witness.

A. No, sir.

Q. Do you understand that a railroad company in acquiring a right-of-way ordinarily has to pay more than the ordinary and normal value of land?

A. It has to pay more than the ordinary value of the land leaving out of consideration the added value given to that land from the fact that it is available and adaptable for railroad purposes.

Adjourned until Wednesday morning, March 31, 1909.

Federal Building, St. Paul, Minn., Wednesday, March 31, 1909.

The hearing was resumed at 10 o'clock A. M.

JOHN D. STRYKER,

sworn on behalf of Complainants, testified:

By Mr. How:

Q. You reside in Duluth, Minnesota?

A. Yes, sir.

Q. How long have you lived there?

A. Over 22 years.

Q. What is your occupation?

A. Real estate and loan agent.

Q. How long have you been in that business?

A. Over 22 years; since I came there.

Q. What is the general character of your business?

A. General real estate agents, selling property and representing owners, looking after properties and making loans—mortgage loans.

Q. Has it been a part of your business to keep advised with regard to valuations of real estate in the city of Duluth from time to time?

A. Yes, sir, we keep a record of the sales; that is, there is a daily record published of the sales, and where the consideration is given in the deed it is reported in this record, and we keep track of that. We keep it by card-index.

Q. What experience have you had in making valuations of property? Have you served as a witness and as an appraiser from time to time?

A. Yes, quite often.

Q. You have been called to testify in court with regard to valuations?

A. Yes, sir.

Q. And you say that has been frequently the case?

A. Why, quite often I am called and subpoenaed or asked to testify as to values.

Q. Describe briefly the topographical character of Duluth with regard to its railroad properties.

A. Why, the property that is available for railroad purposes, particularly in the central part of the city, I should say was very limited; that is, there is quite a steep hill going back from the lake; there is very little level ground between the river and the lake and the hill.

Q. It is confined, then, by the water on one side and the hills on the other?

A. Yes, I should think it was very limited.

Q. You were approached, I think in the fall of 1906, for the purpose of making a valuation of the Great Northern properties in Duluth, with some associates, were you?

A. Mr. Hayden came to our office some time in August or September, I think, during the fall, not later than September, and asked if I would be willing to make the appraisements of the railroad properties there, with two other men I think he said.

Q. And what were you advised or instructed with regard to the character of the appraisal, the character of the valuation desired?

A. There were no instructions given. In fact, I saw very little of Mr. Hayden; he came into the office and I was going away about that time, and I told him that I didn't know that I could serve and I think he asked me to suggest some others, but afterwards I was asked to serve with two other men there, Mr. Mendenhall and Mr. Little.

Q. What purpose, were you advised, was in mind in having the valuation made, the purpose on the part of the railway companies?

A. There was no purpose indicated, no purpose given to me.

Q. What intimation was given to you of any kind from

anybody as to whether it was desirable on the part of the railway companies to have a high or a low valuation?

A. There wasn't anything said about that at all.

Q. You say your associates were Mr. Mendenhall and Mr. Little.

A. Yes, sir.

Q. And did you three take the valuation in hand?

A. After I came back I think Mr. Mendenhall or Mr. Little made arrangements for us to meet at Mr. Mendenhall's office; the plats were I think sent to Mr. Mendenhall, anyway they were there when I went there.

Q. I show you a plat which has been marked Complainant's Ex. 16—Stryker. I ask you if that is a copy of the plat furnished you by Mr. Hayden at that time, representing the Great Northern properties in Duluth?

A. Why, I think it is. At that time the other roads were all on here—this is only one color—there were different colors at that time, showing the different companies' properties.

Mr. O'BRIEN: You valued all the property?

WITNESS: We valued all the property; we didn't separate it all.

Q. But doe sthat, according to your recollection, show the Great Northern properties?

A. I think that is exactly the property as shown at that time.

Q. What method did you and your associates pursue in making the valuation for these railway companies and especially for the Great Northern?

A. We divided it up into districts or into sections, you might say, and put values upon those different sections or pieces of property.

Q. And what was the basis of your division?

A. Why, I think we put a separate valuation on this piece on Sixth avenue west dock.

Q. What I was trying to get at was why did you make divisions into districts?

A. Why, we made an average of the value of the property in that particular district.

Q. Yes, but did you select the property for a district that made about the same value?

A. Of the same value as nearly as possible.

The MASTER: Where is Rice's Point?

WITNESS: This is Rice's Point (indicating on map).

Q. And did you discuss between yourselves the proper valuation that should be made upon these properties?

A. Yes, sir, we had several meetings, two or three meetings.

Q. And arrived at a conclusion and agreement?

A. At an agreement, yes, sir.

Q. And made and submitted a report?

A. Yes, sir.

Q. To Mr. Hayden?

A. I think we sent our report to Mr. Cooper.

Q. With regard to all of them?

A. Yes, it was all made in one report.

Q. I show you a paper that has been marked Complainants' Ex. 17—Stryker, headed "Valuation of Railroad Property at Duluth, Great Northern Railway Company's Property," and ask you if that is a copy of the report made under date of December 27, 1906, by yourself and your associates with regard to the valuation of the Great Northern properties in Duluth.

A. Yes, sir, that is a copy of it.

Q. What elements did you take into consideration and what did you have in mind in making the valuations that you have set forth in that report?

A. We valued the property simply as real estate; that is, land, without reference to improvements; we didn't include any improvements, but valued it simply as real estate.

Q. To what extent did you take the valuations of contiguous

property into consideration?

A. That was the main feature of the values that we put upon it, that is, that was the basis for our arriving at the values we did.

Q. Have you had any experience in disposing of properties to railway companies or purchasing them in behalf of railway companies?

A. I haven't purchased any property for railroad companies; we have sold some to railroad companies and represented the owners where the railroads have taken them, in condemnation; I have never acted for the railroads.

Q. What has been your experience with regard to any enhancement of value, or price at least, of properties sought to be acquired by railway companies?

A. My experience has been that in condemnation they have paid more than the property could have been sold for or could have been purchased for at private sale.

Q. What has been your experience with regard to the opinion of an owner of property with regard to its value in case a railway company desired to purchase it for its use?

A. I think they usually want a stiffer price for it.

Q. A stiffer price than they would have been willing to sell it for for other uses?

A. Yes, when they find that a railroad wants it that has been my experience.

Q. To what extent did you take that fact into consideration in making this valuation?

A. Not at all.

Q. You didn't consider the fact that the property was available for railway use in determining its valuation?

A. Not at all; we valued this property simply as we value any other property.

Q. Taking into consideration the uses to which the contiguous property was put, alone?

A. The location of this property and the value of the surrounding property; we didn't enter into any other consideration, in valuing this property at Duluth, in the least; at any rate I didn't, and I don't think the others did.

Q. It appeared from your discussions that that was what you were all doing?

A. Yes, sir, we were just valuing it as real estate.

Q. What is your opinion, and what was your opinion at the time, with regard to the conservative nature of the valuation which you put upon these properties?

A. We made a conservative valuation; we could have justified a higher valuation.

Q. Was it intended at the time to be conservative?

A. To be a careful, conservative valuation of the property.

Q. What is your opinion now with regard to that valuation, as to whether or not it is a conservative one?

A. It is a very conservative one in the light of what has happened since then.

Q. If you were making that valuation today, would you increase or decrease the aggregate amount?

A. We would be obliged to increase it considerably.

Q. How much do you think?

A. Why, some of it a hundred per cent, some of it fifty per cent; some of it twenty-five per cent; none of it, I guess, less than twenty-five per cent.

Q. Have you known of any transactions in Duluth in property in the neighborhood of this property covered by your valuation which in your opinion justify you in that view?

A. Yes, sir.

Q. Well, can you state one or two of them briefly?

A. Why, this property on Rice's Point particularly, there is a piece just sold here within the last two or three months.

Q. Where?

A. On the east side of Rice's Point. This (map) does not

show the dock-line; the dock-line would come out here somewhere. Mr. Mendenhall and Mr. Hoenckman owned it.

Q. How near to the Great Northern?

A. Well, it joins it; I don't know, there may be a Northern Pacific track on that side of it, but it joins this right-of-way of the defendant railroads here. They sold six lots here, which would be 600 feet east of the right-of-way, out to the dock-line, for $100,000. That would be about 600 by 1000, I figured it out, it would be about $3,600 an acre, and it would be all out in the water except this strip here; there is very little of it that is on land. All of this property is filled, you know.

Q. How does that compare with the valuation which you put upon the abutting railroad property?

A. Our value was $3,000 per acre for all of this.

Q. And you say that Mendenhall sale was how much an acre?

A. About $3,600, if I made correct figures. Anybody could figure it out.

Q. For what purpose was that property sold?

A. Why, I think the Pittsburg Coal Company, or some of their constituent companies bought it; I don't know whom the title went to, but I asked Mr. Hospes, Mr. Mendenhall's partner, what he got for the property, and he told me $100,000. I know there was a mortgage went on record of $75,000.

Q. What other transactions have you in mind?

A. Well, there have been no transactions on this side (indicating).

Q. On which side?

A. On Superior street, the Wisconsin Central have acquired all the property between Superior and Michigan street from Sixth avenue west to between Eighth and Ninth avenues. They paid for some of that property as high as a thousand dollars a front foot, for inside lots; and this property which we have valued for the Great Northern between Sixth and Seventh

avenues we placed at $350 a front foot. That would be on the south side of Michigan street.

Q. How far apart are the Wisconsin Central and the Great Northern?

A. Just across the street; on the lower side of Michigan, this property that we were appraising that was taken by the Wisconsin Central, and this property we appraised is right across Michigan street from there. We put a value between Sixth and Seventh avenues of $350 a foot; between Seventh and Eighth $250; between Eighth and Ninth of $200 a front foot, and between Ninth and Eleventh of $150 a front foot. Now, these sales to the Wisconsin Central were made at prices that would indicate that this property was worth more than the values we put on it.

Q. Considerably more?

A. Well, it would be considerably more near Sixth avenue. Now, property on Superior street has recently sold, one lot between Fifth and Sixth avenues just near Sixth avenue, for nearly $400 a front foot. We have a customer that would pay $1,400 a front foot between Fifth and Sixth on the lower side of Superior, running through to Michigan.

Q. How do these prices compare with the valuations that you placed upon the nearest property?

A. Well, they are much higher now than they were then; that is, all of Duluth central property, while there have not been many sales, they have all been made at higher prices. They are going up every day, and property is becoming more scarce, and it is almost impossible now to get inside property there. And then the property here on the bay front, these prices have appreciated right along; property that we sold for $50 a front foot on Thirteenth avenue west is held now at $100 a foot, and it is not considered out of the way at that. The Soo also paid from six to seven thousand dollars for fifty feet, that is, at that rate, on Ninth and Tenth avenues.

CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. The entrance into Duluth of the railroads that you have mentioned since you made this appraisal has materially increased the price of property, has it?

A. Why, I don't know, Mr. O'Brien, whether it has—I think that has had something to do with it. I don't know whether that—that is not the entire cause of the increase.

Q. No, I suppose not, but—

A. No.

Q. But that has had—

A. That has had its effect; it has made the property more scarce, of course.

Q. There has been a lively market. Now, in valuing this land you simply valued the real estate?

A. Just the real estate, yes, sir.

Q. Disregarding the improvements?

A. Yes, sir, just the land.

Q. And allowing nothing for the cost of removing the improvements or anything of that sort?

A. Nothing.

Q. Just ignoring it. And you put upon that land what you considered its fair value for the purposes for which it is best adapted?

A. For any purpose, just as real estate.

Q. That is, you didn't consider that it would have to be used for a farm or a pasture, or anything of that sort, but you considered it for whatever it was best available?

A. Yes.

Q. And used your best judgment in arriving at its value?

A. Yes, sir.

Q. And in arriving at its value you omitted no element which added to its value, in your judgment?

A. We valued it based upon what the property was worth surrounding.

Q. And your judgment was that the value of that property as returned by you was its real actual value, as the property was situated?

A. Yes, sir.

Q. Without indulging in any speculation or theory?

A. Yes, sir, that is exactly the case.

Q. You didn't consider that it would ever become a bank of cloud upon which harpists could sit, nor did you believe that it was ever going to eventually disappear and cease to exist?

A. No, sir.

Mr. How: I offer these exhibits 16 and 17, and I think I may have overlooked offering the Taylor exhibits and the Elwood exhibits, and I offer them all and each of them. I think in all probability we shall be able to obviate the necessity of printing all of these.

WILLIAM C. READ,

sworn on behalf of Complainants, testified:

By Mr. How:

Q. Mr. Read, how long have you lived in St. Paul?

A. Since 1883.

Q. What has been your business during that time?

A. Since 1885 I have been in the real estate business.

Q. And you are still?

A. Yes, sir.

Q. What has been the general nature of the real estate business which you have followed?

A. My business has been confined almost entirely to city properties in the limits of St. Paul and Ramsey county; I have had no outside business at all.

Q. And what has been the character of the business?

A. Buying and selling for others, for myself, loaning on properties, caring for and managing estates, a general real estate business.

Q. Have you ever bought property for or sold property to railroad companies or for railway uses?

A. I have occasionally; I have never sold any to the Great Northern.

Q. What experience have you had in making valuations of property in St. Paul—estimating values?

A. Well, I have had the same experience that any one conducting a large real estate business would have; I have had special experience in appraising for two loaning institutions, and the general knowledge and general experience that would come to one in nearly twenty-five years of that work.

Q. Do you consider that you have kept closely advised during all the period of your business as a real estate agent and broker with regard to valuations within the city proper?

A. Yes, sir, I have had to.

Q. You were a member of the commission employed by the railway companies in the fall of 1906 for the purpose of valuing the railroad properties within the city limits of the city of St. Paul?

A. I was.

Q. Will you state the circumstances attending your employment as a member of that commission?

A. I was invited to come to Mr. Thomas Cooper's office in the Northern Pacific general office building, and did go there with Mr. O. L. Taylor and John J. Watson, where we met representatives of the different railroads in St. Paul. I do not remember whether all of the roads were represented or not, but my impression is that the most of them were. We were told by Mr. Cooper, especially, as he was chairman of the meeting, that the roads wanted their properties appraised; they didn't explain why; we didn't ask why; but they supplied us with plats, either on that day or later, of the different holdings of the roads here in St. Paul, and told us to in our own way give them as nearly as we could a fair and reasonable price at which those properties might be acquired.

Q. What intimation was given to you as to whether a high or a low valuation was desirable on the part of the railway companies?

A. None whatever.

Q. What was said, if anything, with regard to rate making?

A. Nothing.

Q. Did you have in mind, or do you know whether or not your associates had in mind, anything which would give you any judgment as to whether it was desirable for the railroads to have a high or a low valuation put upon their properties?

A. No, sir; there was nothing that happened at that time that would make such an impression on me.

Q. Well was there anything that happened at any time while you were making the valuation?

A. No, sir; we didn't know what it was for.

Q. What was your method of procedure with regard to that valuation?

A. We took these various plats and retired to a room over on Fourth street where there was a large table, something like the one in front of me, spread out our plats and discussed the matter from every point of view that we could think of; we had somewhat of a hard time agreeing as to the method to proceed, we didn't always agree after we got started, but by discussion we did afterwards or finally unanimously agree on all the prices we fixed. Mr. Watson, I remember, told us of his experience in selling to the Northern Pacific road the site of its office building, some twenty years or more ago, at $5 a square foot. He told us about his experiences in buying for the Wisconsin Central its terminals or part of them. I told the gentlemen of the leases made by the Northwestern Improvement Company to Nelson Morris, Swift, and Armour and the other meat concerns now on Broadway and Fifth and Sixth streets, because I had been familiar with the transactions at that time, back, I think, in 1900. Mr. Taylor told us of his experiences in buying and selling. Just a short time previous, the city had condemned the corner of Third and Sibley, almost opposite the Union depot; we discussed that, as the case had caused a good deal of talk and comment in the city. We discussed all the condemnation cases,—the Abbott condemnation, down in block 52, the sale made by the Kenneys to the gas company, and a sale that I had made at the corner of Third and Wacouta, where I sold 100 feet for $50,000, that same year, and it was over two days, I think, before we placed any figures at all,—we exchanged experiences and information.

Q. All these transactions that you say you recollect that you discussed, were transactions covering property in the immediate neighborhood of these properties that you were called upon to appraise?

A. Yes, sir.

Q. Were you in attendance, during a part at least, of Mr. Taylor's testimony?

A. Yes, only a part.

Q. Did you examine an exhibit introduced through Mr. Taylor, being a plat representing the Great Northern property in St. Paul?

A. Yes, sir.

Q. Was that a copy of the plat furnished you showing the Great Northern properties and upon which you worked?

A. Yes, sir, it seemed to be.

Q. Did you examine the exhibit introduced through Mr. Taylor purporting to be a copy of the report made by you and Mr. Taylor and Mr. Watson of the valuations?

A. Yes, sir.

Q. Is that the report made by you and your associates?

A. It was a copy of it.

Q. What elements did you take into consideration in determining these valuations of the Great Northern property?

A. Why, we took into consideration their location, their surroundings and the uses to which they might be put, among others; it is rather hard to name them all.

Q. Did you take into consideration the value of adjacent property as indicated by sales and other transactions involving the value?

A. We did as far as we could apply such sales.

Q. And I judge from your testimony that the discussions with regard to those various transactions were for the purpose of considering them so far as they would apply in making your determination?

A. That is right.

Q. What were the valuations contained in the report made by you (which is Taylor's Ex. 11) intended to represent when they were made with regard to your judgment?

A. They were intended to represent the price at which we might reasonably be expected to acquire that property.

Q. If called upon to purchase it?

A. Yes.

Q. And upon the basis of what condition of the property at the time?

A. Well, the surrounding conditions; and we did not take into consideration the railroad on it or any houses that might be on it.

Q. Considered the property as bare land?

A. As bare real estate.

Q. You have given considerable attention to the question of the justification of that appraisal since the appraisal was made, have you not?

A. Yes, sir.

Q. You have testified in the Northern Pacific case and you have discussed the matter at length, both with me and with others, have you not?

A. I have.

Q. What is your present judgment upon the question of the reasonableness of that valuation, if made today?

A. If made today I should be inclined to increase the prices. You mean as of 1909?

Q. Yes.

A. At the time we made it, in 1906, we thought we were fixing a fair and reasonable figure upon it. Since then there has been a hardening of prices, especially through the central business part of the town and that section around the terminals, and values have increased considerably.

Q. Can you give an instance of any transaction since you made that appraisal, or which have come to your knowledge since, which in your opinion justify the appraisal, or any part of it, that you didn't know at the time?

A. There was one rather striking example which came to my

notice the other day in the sale of a lot in Kittson's addition to the Soo road; it was Lot 8, Block 23, Kittson's Addition. That lot was sold to the Soo for $52,500, with a three-story double brick building on it which could probably be estimated at $10,000 to $12,500, but allowing $12,500 for the building, you would still have $40,000 left or $8 per square foot. I sold that property to the owner who disposed of it to the Soo for $11,000 in 1901.

Q. What property of the Great Northern would you compare that valuation with?

A. The property just below Seventh street from Sixth to Grove street.

Q. At what figure did you and your associates appraise that?

A. $2.50 a square foot.

Q. What is the situation of that property of which you have been speaking, how does it lie as compared with the railway properties?

A. It is considerably higher; above grade.

Q. It is contiguous to other property?

A. Oh, it is contiguous yes; I suppose it is about two and one-half blocks from the Great Northern tracks.

Q. And do you understand it has been bought for railway uses?

A. Yes, sir.

Q. And is available for that?

A. Yes, sir.

Q. Or will be when cut down?

A. The Abbott case is a better example. That was Lot 4, I think, Block 52, Kittson's Addition. That was condemned by the Northern Pacific road, and they paid $20,823.33 for that property exclusive of the buildings. That was about $3.75 a square foot. That is nearer and more nearly like the property from Sixth street to Grove, which we appraised at $2.50 per

square foot. Those single instances, however, in my estimation, do not settle the matter at all, they are simply a help and a guide, and we could only apply them in a general way as far as they would help us.

Q. Have you had any experience in endeavoring to acquire various tracts of property for the purpose of making one large and comprehensive tract?

A. Yes, I have done a good deal of that.

Q. Will you state what that experience has been as illustrating the claim that properties when available or necessary for the completion of a larger tract enhance in value?

A. They always do, it doesn't matter whether it is for a factory or a railroad, no matter what the buying is done for, it is human nature—as soon as the people realize that their lot is in demand and needed and must be had—for the owners to advance the price. I had a case of that kind for Mr. Stickney, two or three years ago, in West St. Paul.

Q. Buying or selling property for what purpose?

A. I was buying the property for a site for his son's warehouse and factory. He wanted the block, which was Block 6 of Bazille & Robert's Addition. He asked me what I thought those lots could be bought for. I told him I thought I could average about $2500. That was then considered a little bit high. I knew I could buy some for less, but I thought I would get up to that price before I got through. I bought three or four lots at an average of $2250 apiece; then the price jumped to $3,000. For the last three lots he allowed me to buy I paid $3,600 apiece. That gave us eight lots. We needed the other two, but the owner wouldn't sell them at all, we had to stop and leave those two out of the block and the factory was built to accommodate the ground we had. But it doesn't matter what you are buying for, as soon as the owners understand—and they are almost sure to get wind of it—they will advance the price—and I don't blame them much.

Q. Have you known of any other examples of that principle, or at least of that result, reached by anybody seeking to acquire different tracts for the purpose of making one comprehensive tract?

A. Probably a better and more striking example than the one that I have just given would be that of the Soo's purchase of block 23, Kittson's Addition. Four of those lots belonged to non-resident owners who were afterwards clients of mine—they were not at that time. Lots 3 and 4 were sold to the Soo road for 80 cents a square foot by these people living in St. Louis. They are on Eighth street. Lots 5 and 6 were sold by the same people to that road for $1.10 per square foot. They are on Seventh street. Lots 1 and 2 belonged to a St. Paul man who had discovered the reason of the buying and he got $2 a square foot for his. Lot 7 brought $2.50 a square foot. Lot 8 I have told you about, brought $8 a square foot after allowing for the buildings. There were some old buildings on all of these lots, but not of any special value.

Q. How did the lots compare as between themselves with regard to value in your judgment before the use to which they might be put was known?

A. Those on Eighth street, four of the lots were practically of a similar value; there was nothing to give any added value to one over the other. But there was a case where the price had advanced from 80 cents a square foot to $8 a foot. That is practically a thousand per cent. Of course the last named citizen was well and thoroughly advised as to what his lot was wanted for, I mean the owner of lot 8.

Q. And that it was necessary to fill out that tract?

A. Oh, yes, the whole scheme was exposed.

Q. How large a real estate business do you do, Mr. Read; that is, the volume of your business, say in 1906?

A. In 1906 my sales were over three-quarters of a million of dollars. To be exact, they were $786,807.50.

Q. And how are they running at the present time?

A. They are keeping up very well; the sales for this month will go over $100,000.

Q. Did you add anything to the valuation which you set upon these properties or any of them, on account of the fact that a railway company had acquired them and was using them?

A. No, sir.

CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. The difficulties under which a railroad company or any other large purchaser labors, endeavoring to bring into one tract of land several different tracts, were known to you at the time that you made this valuation?

A. Yes, sir.

Q. And that condition was fully considered by you?

A. It was.

Q. And the problem which you set before yourself was to ascertain what a purchaser would be compelled to pay under those conditions acquiring the property at the present time?

A. Yes, we took into consideration these difficulties.

Q. Well, my question can be answered yes, can't it?

A. Yes.

Q. Now, for the purpose of arriving at the normal value of particular tracts of land without regard to the object of their purchase, you did take into consideration surrounding property to some extent?

A. We did.

Q. And such sales as were within your knowledge?

A. Yes, sir.

Q. And you exchanged confidences in this room on Fourth street?

A. We did.

Q. If you had had all of the sales that had taken place in

contiguous property, your knowledge and information upon that point would have been much more complete, would it not?

A. If we had had all of the recent sales it would have been.

Q. All of the sales say for a period of five years?

A. The sales that I have referred to were those happening within a period of a very short time previously.

Q. You did not examine the records for any period of years to ascertain the—

A. No, sir.

Q. Now, Mr. Read, in 1901, you sold the property in Kittson's Addition which was purchased by the Soo road for $50,000?

A. $52,500.

Q. You sold it for $1100?

A. $11,000.

Q. I understand that the improvements upon that property are reasonably worth—

A. Well, I made an estimate there of $12,500 for the buildings. I am not a contractor and I ought not to put a price on them.

Q. I think Mr. Taylor put the buildings at something over $10,000 or about $12,000. You have calculated the value or the price paid for the land at $40.000?

A. That was the way that I arrived at it.

Q. Were the buildings there in 1901?

A. Oh, yes.

Q. So that in 1901 the lands sold for a very small sum if the buildings were worth $12,500?

A. It sold as an entirety, of course.

Q. I know, but on the same basis the land would have sold for very little, wouldn't it?

A. Yes, it all brought very little then.

Q. It is the entrance of the Soo and the extension of the Northern Pacific terminals and other railroad terminals

through Kittson's Addition in this city which has increased the price of that particular land there very much lately, it is not?

A. Yes, the demand that has been created for that land.

Q. The demand created by the railroads?

A. By the railroads principally.

Q. Now, in this same block where this property was sold that you have used as an illustration here, the first lot you say was sold for 87 cents a foot?

A. 80 cents.

Q. That was sold to a non-resident?

A. Purchased from a non-resident.

Q. By a non-resident, and presumably at that time the owner of the property knew nothing as to the design of the railroad companies?

A. No, sir.

Q. Do you consider that under those circumstances that was a fair and reasonable price that was paid for the property?

A. It was probably about as much as the property would bring at that time on the market.

Q. If you had represented that St. Louis owner and knew nothing of the intentions of the railroad companies and had been asked your opinion as to whether that was a fair price or not, would you as the representative of the owner, intending to give him the benefit of your experience and good judgment, have said that that was a fair price for his property?

A. I think I should, because I did not, I don't think anybody suspected that it was available for railroad uses.

Q. And you are still of the opinion that that was a fair price for that property?

A. Under all the circumstances surrounding it, yes.

Q. This price that was obtained for the last lot or two lots, which was a thousand per cent more than was paid for the first lot, was paid after all of the other property in the block had been purchased, and, as you say, when the entire plans of the

railroad were developed?

A. Yes.

Q. And the railroad company was compelled, either to resort to condemnation proceedings or pay the owner of the property the price demanded?

A. Yes, sir.

Q. And under those circumstances they paid to the owner something like twenty times as much as they paid to owners of other property?

A. Yes.

Q. That illustrates the fact that where a person is purchasing a large tract of land, whether for railroad purposes or for any other purpose, portions of that land will inevitably cost much more than the ordinary market value?

A. Yes, it will always cost more, some of it will always cost more, before you get through buying it.

Q. Always cost more than the true value or the real value of the property?

Mr. HOW: What do you man by the "true value"?

Mr. O'BRIEN: I will explain to you in my brief what I mean. I object to your interrupting every time I am endeavoring to cross-examine a witness, Mr. How. This is Mr. Read, and I have recognized his superior capabilities for many years; now leave us alone.

A. Well, that don't distinguish—we have no term in real estate parlance that would hardly fit that, Mr. O'Brien; I don't know what you mean by the real "true" value.

Q. Well, I suppose you don't claim the right of limiting the meaning of the English language, Mr. Read?

A. No, sir.

Q. So that we have to speak in what we call real estate parlance. Now, you know what "true" is, don't you?

A. I do.

Q. If I asked you the true value of a thing you would know

what that meant. Truth is generally supposed to be a fact, a reality.

A. Well, now, ask the question.

Q. I ask you whether it is not true that in all cases where a railroad company or any other person is acquiring one contiguous and large tract of land instances will occur during the course of that process in which the person so acquiring the land will be compelled to pay, for individual tracts, much more than the true or normal value of such tracts.

A. Will have to pay more than you would for the *ordinary value*. Let me use that.

Q. Very well, put it that way. They would have to pay what you would deem an excessive price, in all probability?

A. Yes, what we would call a very high price, for some of it.

Q. Now, Mr. Read, remember I have no quarrel with you in this matter at all, and I am simply trying to get at what the facts are, because finally the responsibility as to which theory in this matter is correct rests with persons other than either you or me, and we simply want not to fall into the mistake of misunderstanding each other.

A. I will try not to.

Q. Now, I want to ask you this. Let us suppose that ten years ago the right-of-way of the Great Northern road was acquired at a cost, let us say, of $100,000; the ordinary value of the surrounding property equally available and of equal area but not taken at that time was $50,000—what we have agreed as the ordinary value of the right-of-way would have been $50,000; but when it was acquired the road was compelled to pay $100,000 for it—do you see—ten years ago?

A. Yes.

Q. Now, during that ten years the value of the surrounding and contiguous property has doubled, so that the value of the property which we took to be $50,000 is now $100,000, what is the value of the railroad right-of-way on the theory adopted by

you in making this valuation?

A. If the surrounding property had doubled in value since this right-of-way had been established, one would have an effect upon the other, they would go up and down together largely, and allowing for the difficulties of acquiring a tract of land through there I think the increase in value would be somewhat proportionately.

Q. So if you were making the valuation of the right-of-way upon the theory of its cost of acquisition at the time you made it now, you would say that the value of the right-of-way would be $200,000?

A. If I understand you correctly—I don't know that I do understand.

Q. Let us assume that ten years ago the Great Northern Railway Company acquired its present right-of-way in the city of St. Paul, that the normal value of the land so acquired, as you have used that word in your testimony, was $50,000, and therefore the normal value of contiguous property of an area equal to the right-of-way was also $50,000; because of the circumstances and conditions which you have detailed in acquiring the right-of-way, of the normal value of $50,000, the Great Northern road paid in fact $100,000—Do I make myself clear so far?

A. I think I have it now.

Q. Now, let us suppose that you are today requested to ascertain the value of acquiring that property today, just as you were asked to ascertain the cost of acquiring the property of the road in 1906, as you have described here, and let us further suppose that since the acquisition of that property by the Great Northern road, property has generally advanced so that now the normal value of contiguous property of an equal area amounts to $100,000 instead of $50,000, as it did at the time the right-of-way was acquired, upon that hypothesis what would

you return as the value or cost of acquiring the right-of-way at the present time?

A. Well, if the surrounding conditions were exactly the same all this time and no changes (you mean) in any other way except such as affected the value—as goes to increase the value of the property?

Q. Well, of course I know nothing about that; I simply state that that property had doubled in value—contiguous property.

A. Well, I don't really understand fully what you are getting at, but the value of the right-of-way is always affected more or less by the value of contiguous property, no doubt of that in my mind at all, and if we had the same problem to go over with of acquiring this property ten years afterward, I presume it would cost us double.

Q And that was what you assumed, in making this valuation, that you had to do—go through and over the problem and difficulties and expense of acquiring the right-of-way?

A. Yes, sir.

RE-DIRECT EXAMINATION.

By Mr. How:

Q. In estimating value of property that is best available for residence purposes, what do you consider its true value, the value that it would have if it were good for nothing but agricultural purposes, or its value for the best use to which it could be put?

A. No, the value for the best and highest use to which it could be put.

Q. When you are estimating the value of property available for railway purposes, what do you consider its true value, its value for use as a beer saloon or agricultural purposes or dumping grounds, or its value for railway purposes?

A. Its value for railway purposes.

JOHN J. WATSON,

sworn on behalf of Complainants, testified:

By Mr. How:

Q. Mr. Watson, how old are you?

A. I am in my 59th year.

Q. How long have you been a resident of St. Paul?

A. Since September, 1875.

Q. What has been your occupation since you have been in St. Paul?

A. For the most of the time real estate owner and operator and agent.

Q. And your real estate business has been of the general character that real estate business has been described to be?

A. Yes, sir.

Q. Have you had more or less—considerable experience at least—in valuations of property in St. Paul?

A. I have.

Q. During all that time?

A. For many years, yes.

Q. Have you engaged in buying or selling, or both, real estate for railway purposes?

A. I have.

Q. To what extent? a considerable extent or—

A. To a very considerable extent.

Q. How much, roughly, of property used or destined for use, according to present plans, in the city of St. Paul, have you been connected with,either on one side or the other, so far as the transaction of its purchase or condemnation goes?

A. Well, a very considerable part of the holdings of the Northern Pacific Railway Company, especially in the Trout Brook valley, were purchased for that corporation by the firm of which I was a member, nearly thirty years ago (between twenty-five and thirty years ago) and in the last six years I

have acquired all of the property known as the Soo right-of-way and terminals in St. Paul.

Q. You were one of the commission of three that appraised the properties within the city of St. Paul owned by the respective railway companies in the fall of 1906?

Q. I think I need not identify the report made at that time by you and your associates, but you did join, did you, in the report made by you and your associates?

A. I did.

Q. And you used the same plat showing the Great Northern properties that they used?

A. Yes, sir.

Q. Now, what, Mr. Watson, with regard to your judgment, did the figures in your report showing the valuation of the respective tracts of property represent?

A. The fair value of the properties.

Q. Did you know, at the time you assisted in this valuation, for what purpose the valuation was to be made?

A. I was told the valuation was to be made for the use of the State or that it had been requested by the state of Minnesota.

Q. Did you know whether it was desirable on the part of the railway companies to have a high or a low valution?

A. The committee was requested to make a conservative valuation.

Q. And what was your endeavor in that regard?

A. To carry out that instruction.

Q. Since that report was submitted, which was I think in December, 1906, what, if anything, has occurred in the way of transactions covering contiguous or adjacent property which in your opinion throws any light upon the reasonableness of your valuations or any part of them?

A. Well, I think the transactions would tend to confirm the reasonableness of those valuations.

Q. Do you know of any transactions that in your opinion would cast discredit upon the reasonableness of your valuations?

A. No.

Q. What is your judgment today, if the valuations were to be made today, with regard to the reasonableness of those figures?

A. Well, I still am of the opinion that the appraisal was a fair one, that if the matter were to be gone over carefully today the tendency would be to increase rather than to decrease the valuations made.

Q. What has been the tendency of the real estate market in inside property within the last two or three years in St. Paul; that is to say, has it been toward strengthening or toward the opposite?

A. The market has strengthened very decidedly in the last two or three years.

Q. Did you in fixing these figures allow anything or add anything or did your associates, so far as you know, on account of the fact that a railway company owned the property and was operating it as such?

A. No, I don't think so.

Q. On what basis did you consider the property—as wholly unimproved and vacant, or as having improvements on it?

A. Well, not railroad improvements.

Q. Did you allow anything for improvements upon the property, or did you estimate it as real estate?

A. Estimated it as real estate—land.

No cross-examination.

Adjourned until Friday morning April 2, 1909.

Federal Building, St. Paul, Minn., Monday, April 5, 1909.

The hearing was resumed at 10 o'clock a. m.

FREDERICK H. PARKER,

sworn on behalf of Complainants, testified:

By Mr. BUTLER:

Q. Your name is Frederick H. Parker?

A. Yes, sir.

Q. And where do you live, Mr. Parker?

A. St. Paul.

Q. And what is your occupation?

A. Auditor of freight receipts Great Northern Railway.

Q. How long have you held that position?

A. Since November 1, 1902.

Q. And how long have you been employed by the company—that time or longer?

A. Over twenty-one years.

Q. In the accounting department all the time?

A. I have been in the accounting department almost twenty years.

Q. At the general offices here in St. Paul?

A. Yes, sir.

Q. You have charge of that part of the accounts of the company which has to do with freight receipts?

A. Yes, sir.

Q. From all kinds of freight hauled on all parts of the line?

A. All freight traffic.

Q. Since the commencement of this suit, have you at the request of the counsel engaged in the case, prepared certain statements with respect to the freight receipts?

A. I have.

Statement produced by witness marked Complainant's Ex. 18-Parker.

Q. A statement marked Complainant's Ex. 18-Parker under the caption following: "Great Northern Railway Line, Statement showing Tons one Mile, Revenue and Rate per Ton per Mile on Freight Business handled during the Months of October, 1907, and April, 1908, and the fiscal years ending June 30, 1907, and June 30 1908"; was this statement prepared by you or under your direction?

A. Yes, sir.

Q. From the papers and records in the office of the company?

A. Yes, sir; in fact that information is kept up from month to month; that is part of our regular statistical information.

Q. This statement is taken from—

A. Our statistical records.

Q. —your regular records?

A. Yes.

Q. And did not involve any separate or particular examination of separate sources in order to get at it?

A. No, sir.

Q. Now, that it may be understood as clearly as possible what it shows, I will ask you to explain to the Master what this statement shows.

A. The statement shows the tons one mile, the revenue and the rate per ton per mile on all freight business of the entire line for the periods stated.

Q. First, for the month of October, 1907?

A. For the month of October, 1907.

Q. And second the same information for the month of April, 1908?

A. Yes, sir.

The MASTER: "Of entire line,"—does that mean the entire system?

WITNESS: Yes, sir.

Q. And shows the totals of those two months?

A. Those two months combined.

Q. And also like information for the year ending June 30, 1907?

A. Yes, sir.

Q. And for the subseqent year, the year ending June 30, 1908?

A. Yes, sir.

Q. These figures indicating the tons one mile, revenue and rate per ton per mile for each of these years are the actual figures?

A. Yes, sir.

Q. And are not based upon any percentage?

A. Not at all; they are actual figures.

Q. The relation between the year and these specimen months?

A. They are actual figures on the rates actually in force.

Q. They are not based upon that relation at all?

A. No, sir.

Q. But from this statement may be seen what relation the months of October, 1907, and April, 1908, bear to these years?

A. Yes, sir.

Q. And it has a bearing upon indicating the correctness of the assumption that these are specimen months?

A. Yes, sir; the particular thing is to show the rates per ton per mile.

Mr. BUTLER: Complainant's Ex. 18-Parker is offered in evidence.

Statement marked Complainant's Ex. 19-Parker, produced.

Q. The statement marked Complainant's Ex. 19-Parker, under caption as follows: "Great Northern Railway Line, Statement comparing Minnesota freight business with that of all other states, and the entire road, Fiscal year ending June 30, 1907"; will you explain to the Master what this statement shows or is intended to show?

A. This statement shows tons carried, tons one mile, per cent of total tons one mile in Minnesota.

Q. That means that all relates to the Minnesota intra-state business?

A. This per cent is the per cent that the intra-state bears to the interstate in Minnesota—that particular per cent.

Q. The first line relates to Minnesota intra-state business?

A. Yes, sir.

Q. And shows, first, tons carried and tons one mile, and then per cent of total tons one mile in Minnesota, that is the per cent of the Minnesota intra-state to the whole in Minnesota?

A. Yes, sir.

Q. Intra-state freight moving in Minnesota?

A. Yes, sir.

Q. The next column?

A. The next column, per cent of total tons one mile, entire road.

Q. That is to say, that shows what the Minnesota intra-state business,—what per cent of the whole lines' freight business the Minnesota intra-state business is?

A. Yes, sir, in tons one mile.

Q. And the last column?

A. Is the average haul.

Q. Of Minnesota intra-state business?

A. Of Minnesota intra-state business.

Q. The statement also shows the same with respect to the Minnesota interstate business?

A. Yes, sir.

Q. Tons carried, tons one mile, percentage, percentage of whole to the whole percentage of Minnesota interstate business to the whole in Minnesota, and then the percentage to the whole system and the average distance hauled?

A. Yes, sir.

Q. And like information as respects the total business in Minnesota and the total business of the whole road?

A. Yes, sir.

Complainant's Ex. 19-Parker offered in evidence.

Mr. O'BRIEN: Mr. Parker, in the third column of the first item 8.26 per cent, do I understand that that represents the percentage of the Minnesota business which the intra-state business is?

Mr. BUTLER: Tons one mile.

WITNESS: That is the percentage that the tons one mile, intra-state, in Minnesota, bear to the total tons one mile in Minnesota.

Q. A statement marked Complainant's Ex. 20-Parker under caption as follows: "Great Northern Railway Line, statement comparing Minnesota freight business with that of all other states, and the entire road, fiscal year ending June 30, 1908"; as I understand it, Mr. Parker, this statement furnishes the same information as respects the fiscal year ending June 30, 1908, as Complainant's Ex. 19-Parker showed as respects the business of the fiscal year ending June 30, 1907?

A. Yes, sir.

Complainant's Ex. 20 offered in evidence.

The MASTER: The next to the last column on this exhibit 20 under "Per cent of total tons one mile, entire road, 3.32 per cent" means that represents the per cent which the state business bears to the whole system, and the column under that 37.81 per cent means the per cent which the interstate business in Minnesota bears to the business of the whole system; is that right?

Mr. BUTLER: Yes, sir, that is right.

The MASTER: I didn't know that he made that explanation.

Mr. O'BRIEN: In tons one mile.

The MASTER: Yes, tons one mile.

Mr. BUTLER: That does not mean tons moved or revenue,

or anything of that sort.

Mr. O'BRIEN: Yes, I was going to say that.

The MASTER: It means tons one mile.

Mr. BUTLER: It would probably be a very different percentage if it referred to either revenue or tons moved.

The MASTER: Yes, but that is the per cent of tons one mile.

Mr. O'BRIEN: Yes.

Q. A statement marked Complainant's Ex. 21-Parker, under caption following: "Great Northern Railway Line (including Willmar & Sioux Falls Railway Co.) statement showing reduction in freight revenue on commodities mentioned below, handled from point of origin to final destination wholly in Minnesota, although more than one carrier may be interested; based on tonnage for year ending June 30, 1907, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railroad & Warehouse Commission, and at rates fixed by Act of April 18, 1907, known as the Commodity Rate Law." Now, Mr. Parker, for explanation of this statement, let us take the first line relating to wheat and follow it through, stating what is shown or intended to be shown in each column as we go on.

A. Column 1, under the head "Rates effective prior to voluntary reductions," shows the earnings on wheat at such rates.

Q. Now let me see if I understand that; that is to say, it shows the earnings on wheat referred to in the caption, based on the tonnage for the year ending June 30, 1907, on the assumption that the wheat rates as they existed prior to the voluntary reduction on grain September 1, 1906, had been in force during the whole period that that tonnage moved in that year?

A. Yes, sir.

Q. Now, column 2, under the head of "Rates voluntarily

reduced on grain September 1, 1906, and on coal October 22, 1906," the figure shown is $527,279.84; is that what the earnings would have been had the rates as reduced September 1, 1906, on grain been applied to the tonnage that moved in the whole year?

A. On the tonnage of wheat.

Q. On the tonnage of wheat, that is what I mean; this all relates to wheat, this first line?

A. Yes.

Q. Column 3, under the head "Rates fixed by Commodity Rate Law April 18, 1907, and by Railway Commission," the first line relating to wheat indicates a figure $500,474.15; that figure is made up on the assumption that the tonnage for the year moved on the rates prescribed in the law, the application of which has been enjoined in this suit?

A. Yes, sir.

Q. And column 4, under caption "Voluntary reductions on grain and coal," the figure $47,612.94, is the difference between the figures relating to wheat in column 1 and column 2?

A. Yes, sir.

Q. And expresses the difference in amount of earnings on the same tonnage that would have resulted had the schedule voluntarily made September 1, 1906, been in force during the whole year, compared with the earnings at the rates prior to that time?

A. Exactly.

Q. Column 5, under head "Rates fixed by Commodity Rate Law April 18, 1907," that shows the difference between columns 2 and 3?

A. Yes, sir.

Q. And indicates the further lessening of revenue that would have taken place had the act of April 18th gone into effect, comparing the earnings on the basis of the rates in that act with the earnings on the basis of the rates voluntarily

made September 1, 1906? Have I got that right?

A. It is exactly as you stated it, but it is providing these rates mentioned in the late law had been in effect during the entire year.

Q. Yes, sir, that is what I mean to say. And as respects wheat, there is no entry under column 6 under the head of "Rates ordered by Railway Commission on merchandise, effective November 15, 1906, and to the jobbing centers May 3, 1907," because these orders did not affect wheat one way or the other?

A. No.

Q. They relate to other matters. And in column 7, headed "Totals," the sum of columns 4 and 5 is taken?

A. Yes, sir.

Q. As respects wheat?

A. Yes, sir.

Q. The same information is given with respect to wheat, flour, flax, mill stuffs, coarse grains?

A. Yes.

Q. And the total of those items opposite the phrase "Total grain and products"?

A. Yes, sir.

Q. And furnishes similar information with respect to cattle, sheep and hogs next below?

A. Yes, sir.

Q. The figures in columns 1 and 2, as I have referred to them here, are, as respects cattle, sheep and hogs, the same, there being no voluntary reduction of rates with respect to that freight as there was with respect to grain?

A. Yes, sir.

Q. There would, therefore, be no information to be placed in column 4 or column 6; and column 7 would be the same as column 5 as respects cattle, sheep and hogs?

A. Yes, sir.

Q. The statement also gives similar information with respect to lumber, lath and shingles, as is given with respect to cattle, sheep and hogs?

A. Yes, sir.

Q. Hard coal: I note there is no information with respect to that; is that because there was no hard coal moved intrastate that was or would have been affected by the rate reduction in question?

A. Yes, sir.

Q. The soft coal: the first column shows what would have been earned had the rates in effect prior to the reduction on coal of October 22nd been applied to the tonnage of the year mentioned in the caption?

A. Yes, sir.

Q. And column 2 shows what the revenue would have been had the rates as reduced October 22, 1906, been in effect during the whole year?

A. Yes, sir, the voluntary reduction.

Q. The third column shows what the revenue would have been had the rates specified in the act of April 18, 1907, which has been enjoined been in effect during that year and applied to that tonnage?

A. Yes, sir.

Q. And extended in the same manner as with respect to grain and products?

A. Yes, sir.

Q. In the first subdivision of the statement. Now, the next subdivision of the statement relates to various carload groceries to jobbing centers; the purpose of that part of the statement is to show the effect of the reduction of rates made by the order of May 3, 1907?

A. Yes, sir.

Q. And the figures in the first column show what the revenue would have been on that business had there been no change

in the rates at all?

A. Yes, sir, if the order had not been made.

Q. Not been made or enforced. And the figures in the second column are the same, because that column refers simply to the voluntary reductions on coal and grain?

A. Yes, sir.

Q. And in the third column is indicated what the revenue would have been had the rates prescribed in the order of May 3, 1907, been in effect all the time?

A. During the entire year.

Q. And columns 6 and 7 indicate what the loss would have been?

A. Yes, sir.

Q. The next subdivision relates to merchandise; the first column shows what the earnings would have been had the rates on merchandise existing immediately prior to November 15, 1906, continued to be applied for the whole year to the end of June 30, 1907?

A. Yes, sir.

Q. There is, of course, no change in the figures in the second column; the figures in the third column, as I understand it, indicate what the revenue from merchandise would have been had the rates prescribed in the Commission's order effective November 15, 1906, been in effect during the whole period named in the caption, that is, the year ending June 30, 1907?

A. Yes, sir; the only modification of that is that those rates really went into effect November 15, 1906; I don't know when the Commission's order was dated.

Q. September 6, 1906. I intended to say in my question effective November 15, 1906; that is the day it took effect?

A. Yes, sir.

Q. And columns 6 and 7 show the difference in revenue on the same tonnage based on the different rates?

A. Yes, sir.

Q. Now, the grand totals are shown in the last line but one, and taking the figures opposite the expression "grand totals" in columns 5 and 6, and adding them together, furnishes a total of $255,574.33?

A. Yes, sir.

Q. The decrease in revenue by reason of the application of the rates here in litigation?

A. Yes, sir.

Q. Now, Mr. Parker, as respects the preparation of these four exhibits, 18, 19, 20 and 21, prior to the preparation of this case for trial or the commencement of that preparation, did your company correctly keep the intra-state business in Minnesota separate from the whole?

A. Prior to July 1, 1908—

Mr. BUTLER: Mr. Parker has made a memorandum that will help us; this statement relates to all four of these statements, doesn't it?

WITNESS: Yes. (Continuing.) Prior to July 1, 1908, tons, ton miles and freight revenue were apportioned between "local to state" and "interstate" according to Great Northern portion of the haul without regard to point of origin or final destination on foreign lines, this basis being the customary one on all railways.

Q. Will you give your example?

A. Example: A shipment originating on the C. M. & St. P. Railway at Chicago, Illinois, destined Fergus Falls, Minnesota, hauled by the Great Northern Railway from Minnesota Transfer to Fergus Falls was considered "local to state."

Q. That is, if it was local to the state on the line of the Great Northern, it was handled as intra-state business in your records?

A. Yes, sir.

Q. Or "local to state" business, and so reported to the Commission?

A. Yes, sir.

Q. And that, as I understand it, has been the custom and practice of your company, and, as you understand it, of all of the companies from the beginning of the reports to the Commission?

A. Up to July 1, 1908.

Q. Now go on. In these statements, especially with reference to the statement Ex. 21—

The MASTER: Do I understand that that was considered as state business, when it was taken on at the Minnesota Transfer from the C. M. & St. P.?

Mr. BUTLER: Yes.

The MASTER: It was considered local to the state?

Mr. BUTLER: And was reported as Intra-state business; that is the same matter that was referred to in the testimony of Mr. Johnson as respects the Northern Pacific Company.

The MASTER: Oh, yes, that is where the trouble came in?

Mr. BUTLER: That is where the trouble comes in in getting at the statistics that are strictly carried for the whole periods desired to be covered, especially as relates to merchandise and intra-state business, and it has become necessary for all of us to take certain months as specimen months for the separation and assume that they are specimen months and make the deductions from that, and that is the purpose of getting this explanation into the record.

Mr. O'BRIEN: I was going to say that is what I understood was the error that they had fallen into; that certain business which was hauled under local conditions was assumed to be state business.

The MASTER: Whereas it was in fact interstate?

Mr. O'BRIEN: But as a matter of fact when you would come to divide the business strictly between state and interstate, it was technically interstate business.

Mr. BUTLER: Yes, just exactly as a passenger would be ticketed from Chicago to Fergus Falls, he would be local to

the Great Northern, but as a matter of fact an interstate passenger.

Mr. O'BRIEN: Now, it might possibly save some future confusion if I would say that our claim will be that in computing the revenue and the loss in revenue, the remaining revenue, of course, the correct figures are absolutely necessary; in computing the cost of doing business it was immaterial because all of that business was done under local conditions and conditions which would be the same as the conditions under which the state business was done; therefore, we shall claim that the error had no effect whatever upon the question of the net cost.

Mr. BUTLER: Your idea being that it cost as much to do one as the other, anyway?

Mr. O'BRIEN: It would cost as much to do one as the other, and so in computing the relative cost it makes no difference whether you call it state or interstate, because the actual facts were that the business was done under conditions which pertain to the local business, but that when it comes to ascertaining the revenue to be derived that of course must be corrected, and we want, so far as I can see, the statements as to the amounts. That is entirely true, I think, with regard to the Northern Pacific, and very likely here also.

Mr. BUTLER: I think these will work out about the same way; that is, I think it will be as satisfactory to you as that was.

Mr. O'BRIEN: Yes; the only thing, I didn't want the Master to get the idea that it would be at all conceded that that error changed the entire relation of the business to each other or necessitated a revision of other things aside from revenue; it did require that.

Q. Now, you may continue your explanation as you have noted it, so as to clear up this whole subject.

A. In connection with Minnesota Rate Case—

Q. That is, with this case?

A. This particular case; statements showing revenue from freight traffic under old and new rates were compiled for years ending June 30, 1907, and 1908, in four statements as follows:

Interstate: business handled by Great Northern Railway in more than one state excluding business between lake terminals (Duluth and Superior) and points in Minnesota, which has been stated separately.

Example: A shipment originating at Fargo, North Dakota, destined, Minneapolis, Minn., hauled by the Great Northern Railway.

Q. Now, to make that plainer, if any further statement be necessary, you took that part of the interstate business which was handled by the Great Northern road in Minnesota and another state?

A. Yes, sir.

Q. And excluding the Duluth-Superior business which is also interstate business?

A. Interstate.

Q. And treated that separately under one head?

A. Yes, sir.

Q. Now go on.

A. Local to state: Business handled from point of origin to final destination wholly in Minnesota, although more than one carrier may be interested. Example: A shipment originating on the C. St. P. M. & O. Ry., at Mankato, Minn., destined to St. Cloud, Minnesota, hauled by Great Northern railway from Minnesota Transfer to St. Cloud.

Q. Now, that is to say you include under the title "Local to state" all business that originates and moves wholly within and terminates within the state of Minnesota, whether on the line of the Great Northern or on the line of it or another and other roads?

A. Yes, sir.

Q. Now, the "local interstate" as you call it, what do you mean by that?

A. Business handled by Great Northern railway between points in Minnesota, but which originates or terminates on foreign lines in other states.

Q. Give an example of that.

A. Example: A shipment originating on the C. M. & St. P. Ry., at Chicago, Ill., destined Fergus Falls, Minn., hauled by Great Northern railway from Minnesota Transfer to Fergus Falls.

Q. That was the kind of business that you formerly included as intrastate business in your reports?

A. Yes, sir.

Q. And in the preparation of this case was undertaken the problem of separating to the correct basis as you have described?

A. Yes, sir.

Q. Now, define "business between lake terminals and points in Minnesota in both directions." That was stated separately.

A. This is interstate business, but was stated separately. Example: A shipment originating at Duluth, Minn., hauled by Great Northern Ry. to St. Cloud, Minn.

Q. That is, as I understand it, on the line of the Great Northern road, Twin City and Duluth business is interstate?

A. Yes, sir.

Q. Your route is through a little portion of Wisconsin?

A. Yes, sir; all business to and from Duluth is interstate.

Q. So any business from the head of the lakes to any point in Minnesota and from any point in Minnesota to the head of the lakes, is on the line of the Great Northern, interstate business?

A. Interstate, yes, sir.

Q. No matter whether it goes to Superior or Duluth or comes from Superior or Duluth?

A. All of it.

Q. Now, will you describe to the Master how you got at the tons and tons one mile for the purpose of this statement; first, as respects commodities.

A. Tons, ton miles and revenue on commodities affected by reduced rates—it might be more definite.

Q. Affected by the rates in question here is definite enough, I think.

A. —were compiled *actually* from our monthly station agents' abstracts of way-bills for years ending June 30, 1907, and 1908.

Q. That is, you cover the twenty-four months?

A. Yes, sir. These abstracts include business between all stations and show commodities in connection with carload shipments. This showed the actual loss on each commodity for these years, but owing to the manner in which our statistics were stated prior to July 1, 1908, we were unable to show the exact division between strictly local to state and local interstate business without examining each way-bill to and from junction points in Minnesota for twenty-four months to ascertain the point of origin or final destination on foreign lines. This was out of the question with the time at our disposal, and division between local to state and interstate was arrived at as follows: We examined all carload way-bills from Minnesota junction points to stations on the Great Northern Railway in Minnesota, and obtained detailed statements from agents at Minnesota junction points showing carload way-bills to their station from all points on our line in Minnesota during the months of October, 1907, and April, 1908, and actually apportioned the tons, ton miles and revenue between strictly local to state and local interstate. Similar apportionment was made in connection with each interline carload way-bill to and from stations on our line in Minnesota during these months. That should say "via Minnesota junction points."

Q. Where—after "interline" or after "way-bill"?

A. It should read "each interline carload way-bill to and from stations on our line via Minnesota junction points during these months."

This gave us the actual division between strictly local to state and interstate business separately by each commodity affected and similar information for all other carload commodities in one item for October, 1907, and April, 1908. We then ascertained what percentage the strictly local to state and local interstate bore to the total by commodities for these months, applying the same per cents to the actual figures by commodities for each year.

Mr. BUTLER: Mr. Parker has prepared an example of that, and if desired it may go in the record.

The MASTER: I think it is desirable to read it right into the record.

A. (Continuing). Example: Of the earnings on shipments of flour which the Great Northern railway handled locally in Minnesota during the months of October, 1907, and April, 1908, 63.02 per cent accrued on shipments which really originated and terminated in Minnesota although more than one carrier may have been interested in the haul, while 36.98 per cent accrued on shipments which originated or terminated in states other than Minnesota. These percents were then applied to the total earnings on flour hauled by the Great Northern railway locally in Minnesota during the year, giving the following figures shown for flour on statements, Complainant's Ex. 22 and Complainant's Ex. 24.

	At Rates effective prior to voluntary reduction Sept. 1st, 1906.	At rates voluntarily reduced Sept. 1st, 1906.	At rates fixed by Commodity Rate Law of April 18, 1907.
Ex. 22—Strictly Local to Minnesota	$23,902.62	$22,950.56	$19,647.08 (63.02)
Ex. 24—Local Interstate.	14 026.00	13,467.34	11,528.86 (36.98)
Total originally compiled as Local to Minnesota.	$37,928.62	$36,417.90	$31,175.94 100%.

In local interstate each one of those totals is 36.98 per cent of corresponding figures covering flour hauled locally by us in Minnesota.

Q. See if I understand you aright about that example, Mr. Parker. As I understand it, according to the method of reporting Minnesota intrastate business, there would have been reported on the basis of the old rates before any voluntary reduction for the months of October, 1907, and April, 1908, $37,928.62?

A. No, sir; that was for the year ending June 30, 1908.

Q. Well, then, for the year instead of for the two months?

A. Yes, sir.

Q. And you separated that by examining the way-bills for two months and selecting the business first that originated within, moved wholly within, and terminated in Minnesota, in which the Great Northern was interested as a carrier?

A. Yes, sir.

Q. And that is $23,902.62?

A. No, sir; that is 63 per cent. You see, I haven't copied those figures.

Q. You haven't given the monthly figures?

A. I haven't given them here, no.

Q. But for the year, assuming those months to be fairly rep-

resentative, or to be exactly representative, the figure would be $23,902.62, strictly local?

A. At rates from the business before.

Q. On the basis of the rates before any reduction?

A. Yes, sir.

Q. And by further examination of the way-bills were selected out the business which was in fact interstate, but which was local to Minnesota on the line of the Great Northern, and what you have denominated as "local interstate"?

A. Yes, sir, that for those two months was 36.98 per cent of the total of flour.

Q. And that produced the figure, assuming those two months to be exactly representative, of that flour of $14,026?

A. Yes, sir.

Q. Now, you took those same tons and applied—

A. That per cent is based on revenue, Mr. Butler; in the division of revenue, we base the per cents on revenue.

Q. Then how did you get the figures in the column under "Rates voluntarily reduced September 1, 1905?"

A. I might explain this; in compiling the figures from the abstracts where the commodities are shown opposite all carload items, we were necessarily obliged to compile them as "local to state," because the abstracts do not show the point of origin or final destination on shipments rebilled at junction points, either to or from our line; we therefore arrive at the business hauled locally by us during the entire year, and then applied the per cents which we had gotten at by an actual examination of the way-bills for October, 1907, and April, 1908; the way-bills showing the point of origin and final destination on shipments rebilled at junction points. That is the distinction between the way-bills and the abstracts.

Q. Well, it may be clear from what you have said, but I don't understand how you arrived at the figures in the second column of your example. Now, I call your attention to a state-

ment marked Complainant's Ex. 22-Parker under caption following: "Great Northern Railway Line (Including Willmar & Sioux Falls Railway Co.) statement showing reduction in freight revenue on commodities mentioned below, handled from point of origin to final destination wholly in Minnesota, although more than one carrier may be interested. Based on tonnage for year ending June 30, 1908, at rates effective prior to voluntary reductions on grain, September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission, and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law." This statement, as I understand it, shows or is intended to show exactly the same information with respect to the business of the year ending June 30, 1908, that Complainant's Ex. 21 is intended to show with respect to the business ending June 30, 1907?

A. Yes, sir.

Complainant's Ex. 22-Parker offered in evidence.

Q. Complainant's Ex. 23-Parker, under caption "Great Northern Railway Line (including Willmar & Sioux Falls Ry. Co.) statement showing reduction in freight revenue on commodities mentioned below handled by Great Northern Railway between points in Minnesota but which originated or terminated on foreign lines in other states; based on tonnage for year ending June 30, 1907, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law." Now, as I understand this Ex. 23, it is its purpose to show with respect to the business for the year ending June 30, 1907, which has heretofore been called in your testimony as local interstate that is, business originating or terminating on another line outside of Minnesota, as Exhibits 21 and 22, show with respect to the strictly intrastate business or business local to the state, as you call it?

A. Yes, sir.

Q. And was it made in the same way?

A. Exactly.

Q. Now, let us take the information that is given with respect to wheat: The first column of figures, as I understand it, is the amount of revenue that would have been received from that local interstate business if there had been no voluntary reduction?

A. Yes, sir.

Q. Now, in getting at the figures with respect to wheat, for example, are they all actual figures, or was there any percentage taken in that? Do you understand me?

A. The actual loss on wheat hauled by the Great Northern Railway locally between points in Minnesota was compiled by examining our monthly abstracts for the entire year ending June 30, 1907.

Q. Now, when you say "the actual loss on wheat," does that include local to the state as "local interstate" as you have called it?

A. I was going to continue.

Q. Well, go on.

A. In order to ascertain the proportion of the loss on wheat which was strictly local to state or intrastate, and the proportion which was interstate, or as we term it "local interstate," we actually examined all of the way-bills covering wheat shipments from Minnesota junction points to stations on the Great Northern railway in Minnesota, and obtained detailed statements from agents at Minnesota junction points showing carload way-bills to their stations from all points on our line in Minnesota during the months of October, 1907, and April, 1908.

Q. So that these figures are based upon the percentage computation which you heretofore explained?

A. Yes, sir.

Q. That is what I wanted to get at. And is that true as

respects flour, flax and grain commodities generally?

A. Yes, sir; all commodities. That is, not merchandise.

Mr. BUTLER: We will offer in evidence Complainant's Ex. 23-Parker.

Q. Complainant's Ex. 24-Parker, a statement under the caption following: "Great Northern Railway Line (Including Willmar & Sioux Falls Ry. Co.) Statement showing reduction in freight revenue on commodities mentioned below, handled by Great Northern Railway between points in Minnesota, but which originated or terminated on foreign lines in other states; based on tonnage for year ending June 30, 1908, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission, and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law." Mr. Parker, Ex. 24 is intended to show the same information with respect to the subject mentioned in the caption for the year ending June 30, 1908, as Ex. 23 shows with respect to the prior year?

A. Yes, sir.

Q. And is made upon the same plan?

A. Yes, sir.

Mr. BUTLER: Ex. 24 is offered in evidence.

Q. Statement marked Complainant's Ex. 25-Parker, under caption as follows: "Great Northern Railway Line (including Willmar & Sioux Falls Ry. Co.) Statement showing reduction in freight revenue on commodities mentioned below, handled by Great Northern Railway between Minnesota and other states. Based on tonnage for year ending June 30, 1907, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission, and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law, not including business between Duluth and Superior and stations in

Minnesota." Now, first, Mr. Parker, with respect to the business intended to be covered by this statement, as I understand it, it is business moving on the line of the Great Northern company in Minnesota, and partly in another state or other states?

A. Yes, sir.

Q. Except the head of the lake business into Minnesota or out of Minnesota to the head of the lakes?

A. Yes, sir.

Q. And is on the same plan as your exhibits 21, 22, 23 and 24?

A. Yes, sir; excepting that it was not necessary to make any adjustment; those figures are actually compiled from the abstracts. There was no adjustment between—

Q. And none of these figures depend—

A. On any percentage.

Q. —percentage relation?

A. No, sir.

Q. The examination of the way-bills affecting this business was made for the full year in this statement, and the full year in the next subsequent statement?

A. Not the way-bills, the abstracts of way-bills.

Q. At any rate, the abstracts show sufficient information from the way-bills to compile the whole statement?

A. Yes, sir.

Mr. BUTLER: Ex. 25-Parker is offered in evidence.

Q. Paper marked Complainant's Ex. 26-Parker under caption as follows: "Great Northern Railway Line (including Willmar & Sioux Falls Railway Co.) Statement showing reduction in freight revenue on commodities mentioned below, handled by Great Northern Railway between Minnesota and other states; based on tonnage for year ending June 30, 1908, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906 at rates ordered by Minne-

sota Railway & Warehouse Commission, and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law, not including business between Duluth and Superior and stations in Minnesota." Mr. Parker, Complainant's Ex. 26-Parker, is intended to show as respects the business of the year ending June 30, 1908, just exactly the same as Ex. 25 is intended to show as respects the business of June 30, 1907?

A. Yes, sir.

Q. And was made on the same plan?

A. Yes, sir.

Q. And is the result of examination of the abstracts of the actual way-bills?

A. Yes, sir.

Q. For the twelve months covered?

A. Yes, sir.

Mr. BUTLER: Ex. 26 is offered in evidence.

Q. Complainant's Ex. 27-Parker, entitled under caption following, "Great Northern Railway Line (including Willmar & Sioux Falls Railway Co.) statement showing reduction in freight revenue on commodities mentioned below, handled by Great Northern Railway between Duluth and Superior and stations in Minnesota. Based on tonnage for year ending June 30, 1907, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission, and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law." Mr. Parker, as I understand this exhibit it shows as respects the interstate business to the head of the lake points, to-wit, Superior and Duluth, to and from points in Minnesota, precisely the same information as is shown with respect to other similar interstate business by Complainant's Ex. 25?

A. Yes, sir.

Q. And are the figures here as respects the commodities the result of examination of abstracts of the actual way-bills for the years covered?

A. They are.

Mr. BUTLER: Ex. 27 is offered in evidence.

Q. Complainant's Ex. 28-Parker, a table under caption following, "Great Northern Railway Line (including Willmar & Sioux Falls Railway Co.) Statement showing reduction in freight revenue on commodities mentioned below, handled by Great Northern Railway between Duluth and Superior and stations in Minnesota. Based on tonnage for year ending June 30, 1908, at rates effective prior to voluntary reductions on grain September 1, 1906, and on coal October 22, 1906, at rates ordered by Minnesota Railway & Warehouse Commission and at rates fixed by act of April 18, 1907, known as the Commodity Rate Law." Mr. Parker, as I understand this Ex. 28, it is intended to show precisely the same matters as respects the business referred to in the caption for the year ending June 30, 1908, as Ex. 27 did with respect to the business of the next preceding year?

A. Yes, sir.

Mr. BUTLER: Exhibit 28 is offered in evidence.

Q. Exhibits 23 and 24 relate, as I understand it, to what you call local interstate business, Ex. 23, for the year ending June 30, 1907, and Ex. 24 for the year ending June 30, 1908?

A. Yes, sir; local interstate.

Q. Exhibits 25 and 26 relate to interstate business, not including Duluth and Superior business, to and from points in Minnesota?

A. Yes, sir; and not including the local interstate, which is referred to in Exhibits 23 and 24.

Q. And Ex. 25, refers to the business for the year ending June 30, 1907, and Ex. 26 to the next subsequent year?

A. Yes sir.

Q. Exhibits 27 and 28 relate to the Duluth and Superior interstate business to and from points in Minnesota; Ex. 27 relating to the business for the year ending June 30, 1907, and

Ex. 28 relating to the year ending June 30, 1908?

A. Yes, sir.

Q. Now, these three classes of interstate business, drawing your attention to them, I ask you from what sources you derived the rates to make the computations which you made as respects these commodities; you appear to have used three sets of rates: (one) the rates as they existed before the voluntary reductions referred to in the caption, (two) the rates as they existed after the voluntary reductions as referred to in the caption, and (three) the rates specified in the act of the legislature of April 18, 1908?

A. The earnings at the rates in effect prior to voluntary reductions and at rates voluntarily reduced on grain September 1, 1906, and on coal October 22, 1906, were taken from tariffs which either had been or were in effect.

Q. That is, from the actual tariffs, you took from the tariffs the rates on the class of business referred to in these exhibits respectively as they existed before the voluntary reductions, and then the tariffs as they existed after the voluntary reductions?

A. Yes, sir.

Q. Now, those two instances were cases where tariffs were actually applied?

A. Yes, sir.

Q. Now, as to the third (the rates prescribed in the act of the legislature of April 18, 1907,) have never been applied even to the local business; now, as to these three classes of interstate business, the local interstate and the regular interstate, and the Duluth and Superior interstate—from what source did you derive the rates upon which these computations are based?

A. Those rates were derived from the tariffs furnished by the traffic department, that is, corrected tariffs.

Q. That is, they furnished you, for the purposes of these computations, the tariffs upon which the computations were made?

A. Yes, sir.

Q. And they were furnished in form changing the old tariffs?

A. Yes, sir.

Q. Did you, yourself, have anything to do with determining whether or not the interstate rates in question upon which these computations were made would have to be put into effect if the rates on commodities which have been enjoined go into effect?

A. No, sir; I merely used the figures which were given to me by the traffic department.

Mr. BUTLER: We will later in the case call the traffic department as respects that, your Honor.

Q. On Exhibits 21, 22, 23 24, 25, 26, 27 and 28, and each of them, are certain statements relating to earnings on merchandise on the basis of the rates before the application of the schedule prescribed by the Commission in its order of September, 1906, and its second order of May 3, 1907, relating to mixed carload lots of groceries into certain jobbing centers named. Now, I want to get you to explain to the Master how those figures were arrived at, that is to say, as between state and interstate business was there a revision of all of the way-bills for the two years covered by the exhibtis, or was there an examination of a lesser period and the figures for the year computed on the basis of the percentage that the lesser period bore to the year, and explain how you got at that in detail.

A. Tons, ton miles and revenue, old and new rates on merchandise shipments, were compiled under the four headings mentioned by examining and classifying all local and interline waybills affected by the reduced rates during the months of July, 1907, and April, 1908.

Q. What do you mean by the "four headings" mentioned?

A. That was the four captions you gave me.

Q. That is, the ton miles?

A. No, I mean by headings, "local" "state," and "local interstate."

Q. You mean by the four headings that which is strictly intrastate business?

A. Strictly intrastate.

Q. That is one; second, that which is local to the state, local interstate?

A. Yes, sir.

Q. Three, that which is the straight interstate except the Duluth and Superior business, and four, the Duluth and Superior interstate?

A. Yes, sir.

Q. Into and out of Minnesota?

A. Yes, sir.

Q. As you define them in the commodity matters?

A. Yes, sir.

Q. Now, go on.

A. When we first started to compile statements in connection with this Minnesota rate case, the way-bills for July, 1907, had just been audited, and, without further assorting, were in proper order to prepare the required information; that is, way-bills, from each station to each other station were assorted in separate lots. This meant a great saving in time. We, therefore, compiled the earnings by application of old and new rates to the business covered by way-bills for July, 1907, intending to base the year on that month. It was afterward decided to prepare similar figures for another representative month, or April, 1908.

Q. That is, on the commodity computations, the two months that you used in the instances where a percentage basis was used were October and April?

A. October, 1907, and April, 1908.

Q. In the merchandise matter it is July and April?

A. Yes, sir.

Q. And the reason for the different months is as you have stated, it being first intended to use only one month, to take July

as being fairly representative of the twelve?

A. Yes, sir.

Q. And later on it was decided to add another month, and April was added?

A. Yes, sir.

Q. But October was never examined?

A. Never compiled.

Q. Go on.

A. After compiling the figures for the months of July, 1907, and April, 1908, we ascertained that the proportion of the merchandise business which moved during those months was as follows:

	Year ending 5-30-08. Pounds.	July, 1907, & April, 1908 Combined Pounds.	Percentage moving in July 1907 and April 1908.
Between Minnesota points and Eastern Terminals. (St. Paul, Minneapolis, Minnesota Transfer, and Hamline Transfer.)	247,431,048	45,697,778	18.47
Between above terminals and points in states other than Minnesota affected by reduced rates	151,931,272	28,258 330	18.59
Between Duluth and Superior and points in Minnesota	58,141,433	9,782,304	16.83
Between Duluth and Superior and points in states other than Minnesota affected by reduced rates.	15,086,739	3,045,502	20.18

Those percents were applied to the actual figures compiled from the way-bills for July, 1907, and April, 1908, under the four headings mentioned, strictly local to the state, local interstate, interstate not including business to and from Duluth and Superior, and business between Duluth and Superior and points in Minnesota. Example: Earnings of merchandise local to state.

Q. That is strictly intrastate business?

A. Yes that is, strictly intrastate; handled from points of origin to final destination wholly in Minnesota although more than one carrier may be interested, during July, 1907, and April, 1908, prior to reduction of November 15, 1906, $163,870.67; after reduction, $130,954.69. Dividing these by 18.47 per cent, we arrive at figures for the year ending June 30, 1908, or $887,226.15, and $709,012.93, respectively, as shown on Ex. 22.

Similar computations were made to arrive at total merchandise business under the other headings mentioned, that is, local interstate, interstate, and business between Duluth and Superior and points in Minnesota. Corresponding figures for year ending June 30, 1907, were arrived at by ascertaining what percentage the total merchandise to and from eastern terminals for July, 1907, and April, 1908, bore to the total merchandise to and from same terminals for the year ending June 30, 1907.

Q. What do you mean by "eastern terminals" as you use it in this statement?

A. Why, in connection with the—

Q. Do you mean the terminals at the eastern part of Minnesota?

A. Yes.

Q. What stations?

A. I would use St. Paul, Minneapolis, Minnesota Transfer and Hamline Transfer in connection with that portion of the statement. When I come to the Duluth and Superior business, I would use the percentage to and from Duluth and Superior.

Q. Go on.

A. This basis was considered more accurate than to compile the earnings for any two months and multiply them by 6, owing to the fact that of all the merchandise handled locally in Minnesota between 85 and 90 per cent moves to or from these eastern terminals.

Q. Complainant's Ex. 29-Parker, a table under caption fol-

lowing: "Great Northern Railway Line (including Spokane Falls & Northern, Kootenai Valley and Bedlington & Nelson Railways) Statement showing total freight revenue from interstate business including proportion of interstate in Minnesota and local to state business excluding business local to Minnesota and loss which would result if the same percentage of reduction ordered by Minnesota Railway & Warehouse Commission on merchandise November 15, 1906, and carload groceries to jobbing centers May 3, 1907, and by House File 1190 Rate Law of April 18, 1907, on commodities specified, had been applied to the balance of the line; years ending June 30, 1907, and 1908." This statement is aimed to cover two years?

A. Yes, sir.

Q. Now, will you explain the statement, that is, following the caption; I have read the caption into the record.

A. The first item "Local to state excluding business strictly local to Minnesota and interstate, including interstate in Minnesota and all other states"—

Q. That means, as I understand it, all of the business local to all of the other states, touched by the line of the Great Northern, states other than Minnesota touched by the line?

A. Yes, sir.

Q. And also includes all the interstate business on the line, including the Minnesota interstate business?

A. Yes, sir.

Q. Under the column "Freight revenue, year ending June 30, 1907," is the actual revenue that was received for the business described in that year?

A. Yes, sir.

Q. That is $39,926,557.56; and for the subsequent year the same business yielded $37,952,982.43?

A. Yes, sir.

Q. And the next item is what?

A. "Loss on above business on basis of the percentage of re-

duction which was ordered on merchandise and commodities affected locally in Minnesota."

Q. That is, for the year 1907 you applied a reduction of 14.38 per cent to the $39,926,557.56?

A. Yes, sir.

Q. And for the next subsequent year you applied a percentage of 14.80 per cent to the $37,952,982.43?

A. Yes, sir.

Q. These percentages are the percentages of reduction of revenue derived from business actually affected by rates specified in the caption?

A. The intrastate business in Minnesota actually affected.

Q. The strictly intrastate business actually affected?

A. Yes, sir.

Q. Now, there was some business not affected, especially in the commodities?

A. Yes, sir.

Q. So the percentage of reduction of the revenue derived from all the business would be less than these percentages which you have indicated 14 and a fraction?

A. Yes, sir.

Q. And that is shown in the next line, is it?

A. Yes, sir.

Q. And for the year 1907, that percentage was 10.15 per cent?

A. Yes, sir.

Q. Which applied to the first figures in that column $39,926,557.56 yields a result of $4,052,545.59?

A. Yes, sir; loss.

Q. And that percentage for the subsequent year was 11¼ per cent?

A. Yes, sir.

Q. Applying that to the $37,952,982.43, yields $4,269,710.52?

A. Yes, sir.

Mr. BUTLER: Ex. 29 is offered in evidence.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. Complainant's Ex. 30-Parker, being a table under caption as follows, "Great Northern Railway Line (Including Spokane Falls & Northern, Kootenai Valley and Bedlington & Nelson Rys.) Statement showing number of tons of revenue freight moved one mile and freight revenue as outlined below, years ending June 30, 1907 and 1908," this statement, as I understand it, shows two things: tons one mile and revenue; first for the year ending June 30, 1907, and next for the year ending June 30, 1908?

A. Yes, sir.

Q. And subdivides both the tons one mile and revenue as indicated in the margin at the left?

A. Yes, sir.

Q. The first item is local interstate in Minnesota that is handled by the Great Northern railway between points in Minnesota but which originated or terminated on foreign lines in states other than Minnesota; that is, what has heretofore been called the Minnesota interstate or local interstate?

A. Local interstate.

Q. And the next subdivision is the interstate in Minnesota; that is, that handled by the Great Northern railway partly within and partly without the state of Minnesota?

A. Yes, sir.

Q. And the next is local to Minnesota; that is, handled wholly within the state, although more than one carrier may be interested that is strictly intrastate business in which the Great Northern is interested as a carrier?

A. Yes, sir.

Q. And the next subdivision is the total in Minnesota local to the state, local interstate and interstate. Does that include

all of the freight business moving on the rails in Minnesota?

A. Yes, sir; Minnesota's proportion of it.

Q. That is, the local business and Minnesota's proportion of the interstate business?

A. Minnesota's proportion of the interstate business.

Q. The next subdivision shows the aggregate local to states other than Minnesota and the interstate in states other than Minnesota?

A. Yes.

Q. That is, that includes all of the freight business except that indicated in the subdivision next above it—the total Minnesota business?

A. Yes, sir.

Q. The last indicates the grand total of all states local to state and interstate?

A. Not the last, the next to the last.

Q. From which you deduct the local for Minnesota?

A. The strictly intrastate.

Q. It leaves the total local to states other than Minnesota and interstate including proportion of interstate in Minnesota?

A. Yes, sir.

Q. The purpose of this statement is to make a comparison of tons one mile and of revenue derived therefrom as respects the various kinds of traffic indicated in the margin?

A. Yes, sir.

Q. For both years?

A. Yes.

Mr. BUTLER: Ex. 30 is offered in evidence.

Q. Complainant's Ex. 31-Parker—a table under caption following: "Great Northern Railway Line (Including Willmar & Sioux Falls Railway Co.) Statement showing freight revenue on commodities mentioned below, handled from point of origin to final destination wholly in Minnesota, although more than one carrier may be interested, based on tonnage for year ending

June 30, 1908, at rates effective prior to reduced rates ordered by the Minnesota Railway & Warehouse Commission on merchandise effective November 15, 1906, and on carload groceries to jobbing centers effective May 3, 1907, and rates fixed by commodity-rate law April 18, 1907." Will you explain the table below the caption?

A. The object of this statement is to show the percentage of the commodities affected by the reduced rates, and the percentage of the total business strictly local to Minnesota, or intrastate, which is not affected by the reduction.

Q. The grand total of revenue is shown to be $2,545,337.98; that is the revenue on Minnesota intrastate freight business which is indicated in the margin of the statement, is it not?

A. That is the actual revenue local to Minnesota for the year ending June 30, 1908.

Q. And now with reference to the first line, the revenue on wheat was $434,597.40?

A. Yes, sir.

Q. That was 17.07 per cent of the total?

A. Of the total local.

Q. And the revenue from flour was .91 per cent?

A. Yes, sir.

Q. And of flax 1.50 per cent?

A. Yes, sir.

Q. And the purpose of this statement is to show what percentage the revenue of each commodity or kind of freight indicated in the margin is to the whole—that is, Minnesota intrastate freight?

A. Yes, sir.

Mr. BUTLER: Ex. 31 is offered in evidence.

Q. Complainant's Ex. 32-Parker—a table under caption following: "Great Northern Railway Line (Including Willmar & Sioux Falls Railway), Statement showing Minnesota proportion of freight business, revenue freight only, as outlined below,

year ending June 30, 1907." Mr. Parker, where is the Mesaba division of the Great Northern line?

A. In the northern part of the state, in the ore district.

Q. That is the division that handles iron ore from the Mesaba iron range to Lake Superior?

A. Yes, sir; that is the principal commodity.

Q. The docks of these mines are in Minnesota?

A. They are in Wisconsin.

Q. The docks are at Alouez Bay, in Wisconsin?

A. Yes, sir.

Q. The mines are in Minnesota?

A. Yes, sir.

Q. This statement, as I get it, is a comparison on the basis indicated in it between the Mesaba division and other divisions of your company?

A. Yes, sir.

Q. Is iron ore handled on any of the other divisions, are there any iron mines on any divisions except the Mesaba?

A. There are no iron mines on any other divisions, and there is comparatively little iron-ore traffic on the other divisions. An occasional shipment may come via Minnesota Transfer.

Q. The principal business of the Mesaba division, measured by gross tons, at any rate, is the ore business?

A. Yes, largely.

Q. Now, will you explain the statement.

A. This statement shows, first, the revenue.

Q. Well, it is first divided into business that is local to Minnesota, that is handled wholly within the state?

A. Yes, sir.

Q. And what does it show with respect to that business?

A. It shows revenue and average haul in Minnesota in miles, for the Mesaba division in one item, and all the other divisions of Minnesota traversed by the Great Northern, in

another item.

Q. And total?

A. And total, which is strictly intrastate business in Minnesota for that year.

Q. And the average haul of each?

A. In Minnesota; yes, sir.

Q. That is to say, with respect to the business local to Minnesota, the Mesaba division, in the year ending June 30, 1907, earned $122,487.06?

A. Yes, sir.

Q. And the average haul on this local business was thirty-five miles?

A. Yes, sir.

Q. The other divisions of the Company earned $2,394,433.25 and had an average haul of 119.6 miles?

A. Yes, sir.

Q. The next subdivision of this Ex. 32 relates to the Minnesota proportion of interstate business including local interstate business?

A. Yes, sir.

Q. By "local interstate business" is meant what you have heretofore defined it to mean?

A. Yes, sir.

Q. And shows that the Minnesota proportion of revenue for the period named on the Mesaba division was $5,019,661?

A. Yes, sir.

Q. And the average haul in Minnesota was 101.4 miles?

A. Yes, sir.

Q. And the average haul in all states was 237½ miles?

A. On this particular business.

Q. And makes comparison with the figures relating to the Mesaba division with all of the other divisions of the Company?

A. In Minnesota.

Q. As respects the business that touches Minnesota?

A. Yes, sir.

Q. The revenue of which on the other divisions was $9,701,926.57?

A. That is Minnesota's proportion of it.

Q. The average haul in Minnesota was 175.9 miles?

A. Yes, sir.

Q. And the average haul in all the states 621 miles?

A. Yes, sir.

Q. And then the totals and the average of the totals?

A. Yes, sir.

Q. And as respects the Minnesota proportion of interstate business, including this local interstate business, you have made the further separation between iron ore and other commodities?

A. Yes, sir; on all divisions in Minnesota, including the Mesaba.

Q. It shows the revenue from iron ore for the period covered—that is, Minnesota's proportion of the revenue from iron ore—was $3,119,048.37; the average haul in Minnesota was 95.5 miles, the average haul in all the states 111.7 miles?

A. Yes, sir.

Q. That is compared with like information as respects the other commodities and the total of both?

A. Yes, sir.

Q. This exhibit is again subdivided, showing "Minnesota proportion, local to state and interstate including local interstate business." Just what class of business is included in this one that was not in the one just above? I don't catch that immediately. Oh, that includes it all; that includes the intrastate and all kinds of interstate business, and is really the sum total of the first two divisions of it?

A. Yes, sir.

Q. That is, the third division of this exhibit, puts together the information in the first two divisions, does it not?

A. Yes, sir.

Q. That is, it shows that with respect to the Mesaba division

the intrastate business added to the Minnesota proportion of interstate business, amounted to $5 142,148.06, and that the average haul in Minnesota was 100.2 miles?

A. Yes, sir; that includes all business on the Mesaba, local interstate also.

Mr. BUTLER: Ex. 32 is offered in evidence.

Q. Complainant's Ex. 33-Parker—a table under caption following, "Great Northern Railway Line (Including Willmar & Sioux Falls Railway) Statement showing Minnesota proportion of freight business, revenue freight only, as outlined below; year ending June 30, 1908." Mr. Parker, this statement, as I understand it, is the same as respects the year ending June 30, 1908, as Ex. 32 was as respects the next preceding year?

A. Yes, sir.

Mr. BUTLER: Ex. 33 is offered in evidence.

Q. A set of tables marked Complainant's Ex. 34-Parker consisting of four sheets the first of which, as I understand it, is a recapitulation of the other three?

A. Yes, sir.

Q. The three sheets which are marked sheets No. 1, No. 2 and No. 3 are under caption following, "Great Northern Railway Company. Statement of Station Earnings and Expenses by territories in Minnesota as shown, Fiscal years ending June 30, 1902, to 1906, inclusive." Now, Mr. Parker, as I understand those first three sheets, they relate to the stations, St. Paul to St. Cloud via main line and Osseo line exclusive of all terminals and St. Cloud, in the first subdivision of that statement?

A. Yes, sir.

Q. The next subdivision, "St. Cloud to Barnesville, exclusive of these two stations"?

A. Yes, sir.

Q. And next "Minneapolis to Breckenridge, exclusive of these two stations"?

A. Yes, sir.

Q. Next "St. Cloud to Willmar, exclusive of these two stations"?

A. Yes, sir.

Q. "Willmar to South Dakota State Line—Exclusive of Willmar?"

A. Yes, sir.

Q. "Coon Creek to Hinckley, exclusive of these two stations"

A. Yes, sir.

Q. "St. Cloud to Wisconsin state line, exclusive of St. Cloud"?

A. Yes, sir.

Q. "Elk River to Milaca, exclusive of these two stations"?

A. Yes, sir.

Q. "Sauk Center to Cass Lake, exclusive of these two stations"?

A. Yes, sir.

Q. "Fergus Falls to Pelican Rapids, exclusive of these two stations"?

A. Exclusive of Fergus Falls.

Q. "Benson to South Dakota state line, exclusive of Benson"?

A. Yes, sir.

Q. Morris to Brown's Valley, exclusive of Morris?

A. Yes, sir.

Q. Evansville to Tintah, exclusive of these two stations?

A. Yes, sir.

Q. Hutchinson Branch, exclusive of Minneapolis?

A. Yes, sir.

Q. Wahpeton to Redland via Moorhead, exclusive of stations in North Dakota, Moorhead and Redland?

A. Yes, sir.

Q. And the recapitulation includes under the appropriate

heads the totals from all these parts of the line?

A. Yes, sir; by year.

Q. By years. Now, looking at sheet No. 1, to illustrate what this exhibit shows in the left-hand margin appears the years 1902 to 1908, inclusive, and as respects the part of the road at the top of the subdivision of this statement it shows the total number of pounds of freight forwarded from these stations in the aggregate?

A. Yes, sir.

Q. That is, on the stretch of road from St. Paul to St. Cloud via main line and Osseo line, exclusive of terminals and St. Cloud?

A. Yes, sir.

Q. And the revenue received from the freight so forwarded?

A. Yes, sir.

Q. It also shows the number of pounds received at all these stations?

A. Yes, sir.

Q. And the revenue derived from the freight received; is that right?

A. Yes, sir.

Q. And then it shows the total freight revenue at all—

A. That is the total.

Q. —of the forwarded and received?

A. Of the forwarded and received.

Q. And it shows with respect to the passenger business the number of passengers forwarded from the aggregate of these stations, and the revenue derived from the same?

A. Yes, sir.

Q. That shows the passengers one way only or both ways?

A. Just forwarded.

Q. But does not show the passengers to the stations named?

A. No, sir.

Q. And the next column shows the total of the freight and

passenger revenue heretofore shown on the subdivision of the exhibit?

A. Yes, sir.

Q. And the last column shows the disbursements on account of station wages and supplies?

A. Yes, sir.

Q. In preparing this exhibit was each station treated separately?

A. Yes, sir.

Q. And you have like figures as respects each station covered by these statements?

A. Yes, sir.

Q. All tabulated?

A. Yes, sir.

Q. In a statement like this, which of course would be much longer than this?

A. Yes, sir; they are not tabulated into groups into the territories, they are tabulated by stations.

Q. And the recapitulation simply gives the totals of all that is shown on the sheets 1, 2 and 3?

A. Yes, sir.

Mr. BUTLER: Ex. 34 is offered in evidence.

Q. Have you compared the parts of the line referred to on this Ex. 34 with the whole Great Northern line in Minnesota? In the first place, is all of the main line included in the statements, all that may be properly called main line? in other words, do you know what proportion of the mileage in Minnesota is covered by this Ex. 34, and its character as to the main line or branches?

A. This statement includes all of the main line and a great many of the branches, but it does not include all of the branches of the whole state.

Q. Have you at your office worked up all of the stations on the branches in this way?

A. We have them worked up, but not put together in this way by years; we have the information there, have it every year; it is a regular statement, part of our records.

Q. But it has not been tabulated?

A. No.

CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. Mr. Parker. I forget, what did you say your position was with the Great Northern road?

A. Auditor of freight receipts.

Q. I noticed most of these exhibits are marked "Accounting department"; is that a separate department from yours?

A. Mine is a branch of the accounting department.

Q. Yours is a branch of the accounting department?

A. Yes, sir.

Q. Well, were those tables prepared by you?

A. They were prepared under my immediate supervision.

Q. Yes. Well, that is the same thing.

A. Yes.

Q. They were prepared under your immediate supervision?

A. Yes, sir.

Q. Of course, I understand you had to have assistance?

A. Yes, I outlined the plan all the way through and followed them up all the while they were preparing them; I practically dropped everything else.

Q. I desired to know that they were your work. Now, Ex. 18-Parker, is a statement showing tons one mile, revenue and rate per ton per mile on freight business during the months of October, 1907, and April, 1908, and the fiscal years ending June 30, 1907, and June 30, 1908?

A. Yes, sir.

Q. So far as the detailed information is concerned for the months of April and October, they are in this exhibit for the

purpose of showing the basis upon which you arrive at certain percentages used in subsequent tables, are they not?

A. Yes, sir; the principal thing was to show how the average rate per ton per mile of these months compared with the fiscal years.

Q. That is, for the purpose of demonstrating that the months of April and October were average months?

A. Yes, sir.

Q. And furnished an average for the year?

A. Yes, sir.

Q. It has been your experience that that is the fact, has it not?

A. Yes, sir; I selected them really before I worked the figures.

Q. And you have often had occasion to arrive at conclusions upon that same theory, have you not, by taking the results for two months?

A. We don't often have to do it; we very seldom have a statement that involves as much work as this.

Q. Well, possibly that is so, but you often have had occasion to use those months for the purpose of arriving at an estimate or conclusion as to a year's business?

A. Well, not often; I have used them, however.

Q. And whenever you have had occasion to use them you have found that they were average months?

A. Yes, sir.

Q. And it wouldn't make very much difference as to whether the months were taken from one year or another year, would it?

A. Why, I shouldn't judge so.

Q. So that it is your deliberate judgment that the months of April and October do furnish a proper basis for the estimating of a year's business?

A. Yes, sir.

Q. You have used October, 1907, and April, 1908, here; you haven't used the two months of 1907 or the two months of 1908; was that because you desired to select the months within the same fiscal year?

A. Well, in preparing one statement they are in the same fiscal year, and for the other they are not; I just selected those two months. I presume one reason was because they were the last two months and it was handier to get at the records.

Q. So it was not the result of any deliberate intention on your part that in one instance the months you used, April and October in the same fiscal year, were used, and in another instance you used those months in the same calendar year? It was just a matter of convenience?

A. Just a matter of convenience, that was all.

Q. Do you think it would make any difference in the general result if you had, in the case, for instance where you used those two months from the same calendar year, if you had taken the months from the same fiscal year, would it have made any appreciable difference in the result?

A. I wouldn't judge so, Mr. O'Brien; it would undoubtedly make some slight differences.

Q. Oh, it might make a very slight difference, but your judgment is it wouldn't make any appreciable difference?

A. No, sir.

Q. The difference would be negligible in your judgment?

A. Yes, sir.

Q. And I suppose that within a period of two or three years that would be true, wouldn't it, you would have to put those months wide enough apart so that there would be a considerable difference in the business done by the road generally in order to have the variation important?

A. I should judge so.

Q. And it really would not have made any difference if you had used October, 1906, and April, 1908, the result would have

been practically the same, wouldn't it?

A. Well, I can't say exactly as to that, because we have picked these months out as six months apart and they average up, the months for that year, pretty well, but I would not care to say that October, 1906, and April, 1908, would be average months.

Q. That might be getting too far apart?

A. Yes, it might.

Q. It is not because of the length of time between the months that they are selected, is it? it is because of the fact that they are in exactly opposite seasons of the year, and in that way you get an average of the general business?

A. The idea is they are in different seasons of the year, and taking the year's business, the grain would naturally move in the fall, and probably some other commodities in the spring.

Q. Ex. 18 refers to the entire line, as I understand it?

A. Yes, sir.

Q. Where in the third column of Ex. 18 you say "Rate per ton per mile," that means receipt per ton per mile also, does it not?

A. Yes, sir.

Mr. BUTLER: It means the rate actually received.

Mr. O'BRIEN: Yes.

Q. Or as suggested it means the rate actually received?

A. Yes.

Q. I observe that the rate for the year 1908 upon the entire line was 7.81 mills?

A. Yes, sir.

Q. What was your total freight revenue in Minnesota from intrastate business during the year ending June 30, 1908?

A. $2,366,359.02, as shown on Ex. 30.

Q. And what was the rate per ton per mile upon that business actually received?

A. 13.8 mills.

Q. In that connection, Mr. Butler wants me to ask you what was the average length of haul.

A. 113.3 miles.

Q. Does that include any iron ore?

A. No, it does not.

Q. Does it include any shipments between the head of the lakes and St. Paul?

A. No, sir.

Q. That revenue is the amount actually received, during the year mentioned?

A. Yes, sir.

Q. And during all of that time the rates upon merchandise fixed by the Commission's order have been in force?

A. Yes, sir.

Q. So that the deduction in revenue on that business, if the commodity rate had been in force, would be the amount shown on Ex. 22, $87,261.43?

A. Yes, sir.

Mr. BUTLER: That is, lower than what would have been produced by the rates after they had been voluntarily reduced.

Q. Will you please deduct from your total revenue the amount of $87,261.43, and then give me the rate per ton per mile which would have been received.

A. 13.3 mills per ton per mile.

Q. Could you give, without very much trouble, the tons hauled one mile, and the revenue, where the haul was less than two hundred miles, and the average length of haul for that class of freight, the tons hauled one mile, the revenue where the haul exceeded two hundred miles, and the average haul for that class?

A. No, that would be an enormous job. We don't compile our statistics on that basis.

Q. Well, when you were making these tables, going over these two typical months, April and October, you could have

done that then without very much trouble, I imagine, couldn't you?

A. Well, we could do it, but it would be a large job. We would have to take all these stations regardless of how they were situated and separate them further into length of haul. They are not prepared on that basis you know.

Q. Now, in this revenue that you received, there is included a great deal of freight that was hauled at a lower rate than required by either Chapter 232 or the order of the Commission, was there not?

A. I don't think there was any in the local to Minnesota figures.

Q. Is it not the fact that a great deal of the lumber transported by you locally in Minnesota is carried at a lower rate than the rate provided for in Chapter 232?

A. Not to my knowledge; I understand in the business from Duluth and Superior there may be some like coal from Duluth and Superior to eastern terminals, but that is interstate on our line.

Q. Well, are there no lumber mills, located upon your line in the state of Minnesota from which lumber is shipped to St. Paul and Minneapolis or to other points in the state?

A. Yes, sir.

Q. And do not your rates from those lumber mills meet the rates from the lumber mills upon the Northern Pacific?

A. I am not familiar with the grading of the rates; there may possibly be such business, but I am not aware that there is in the local to Minnesota figures.

Q. It has appeared in evidence in this case, as I remember it, that from such points as Little Falls upon the line of the Northern Pacific road the rate to St. Paul and Minneapolis is much lower than the rate provided for in Chapter 232 upon lumber.

A. Our traffic department could, of course, tell about that.

Q. You don't know about that?

A. I don't know that there is any, personally.

Q. But of course you do know that what is called the relation of rates from the industries upon your line in the northern part of the state, as compared with the industries upon the line of the Northern Pacific is maintained; now, if that is true, this rate of 13.3 mills per ton per mile does not give the total revenue which would be allowed under the order of the Commission and under Chapter 232?

A. I don't believe I follow you, Mr. O'Brien.

Q. Well, if in fact you are maintaining from different points upon the line of your road a rate much lower than the rates provided by the state authorities, that is, the rate per ton per mile which we have ascertained that you would earn, if those prescribed rates were in force, doesn't represent the actual amount which you would be allowed to earn by law, but represents the amount which would come from maintaining your low rates (if there are such) in certain localities, and putting in the state rates at such points as your present rates exceed that rate?

A. Oh, yes, that would certainly affect the average.

Q. I now call your attention to Ex. 19. I find that in the third column the Minnesota intrastate business, computed in ton miles, was only 8.26 per cent of the entire business done in the state of Minnesota—and this has all reference to freight, as I understand it?

A. Yes, sir.

Q. What percentage of the entire revenue earned in the state of Minnesota was derived from Minnesota intrastate business?

A. 15.1 per cent plus.

Q. So that while the tons carried one mile only represented 8.26 per cent of the business done in Minnesota, the revenue derived from that business constituted 15.1 per cent of the entire revenue in Minnesota?

A. Yes, sir; that is caused by the low rates on iron ore on the interstate business.

Q. Well, do you desire to say that that is caused by the low rates on iron ore exclusively?

A. No, I would not say exclusively, but that is one reason why it would vary.

Q. Isn't it caused by the low rates on many other kinds of interstate business as well?

A. Well, that would have a bearing on it, but iron ore would be the bigger factor.

Q. Wouldn't lumber shipments from the coast be another very large factor?

A. Yes, it would.

Q. Could you tell whether the lumber shipments from the coast would be the greater factor or the iron ore the greater factor?

A. I haven't the figures but I would judge from the enormous tonnage of iron ore that that would be the greater.

Q. You have never made a calculation of that sort, have you?

A. No, sir.

Q. And in your suggestion that that came from iron ore you are merely hazarding a guess. What is the rate per ton on iron ore?

A. I haven't the figures here, but my recollection is it is something less than half a cent.

Q. Per ton per mile?

A. Yes, sir.

Q. And what is the rate upon lumber from the coast per ton per mile?

A. Well, I haven't those figures.

Q. It runs from two to three mills, doesn't it?

A. No, sir; not as low as that.

Q. About how low is it? What is the rate?

A. Taking Seattle, the rate on lumber and shingles is 55 cents; that would be 5.1 mills; 55 cents a hundred or—

Q. During the time that these figures were being prepared, the rate was less than that, wasn't it?

A. This is the year ending June 30, 1908? No, I have given you the compromise rate that was agreed to.

Q. Yes, but that was after the 1st of June, 1908; that is nearly a year ago now.

A. November 1, 1907.

Q. You have made this calculation upon shingles, have you not?

A. Well, of course, there are different rates there; I just took the rate I was familiar with.

Q. Well, isn't the present rate upon fir lumber 4.5 mills per ton per mile?

A. No, sir; that would be almost a half a cent a ton a mile, taking from Seattle, and a great deal of our lumber originates east of that, even.

Q. Now, your traffic in that is very large, isn't it?

A. Well, it is quite an item, but it is not large compared with the total of all the other commodities in Minnesota.

Q. And the haul in Minnesota is a great deal longer?

A. Longer than what?

Q. Than the iron ore.

A. Oh, yes, it would be.

Q. Exhibits 21 and 22 are the same except that Ex. 21 applies to the fiscal year ending June 30, 1907, Ex. 22 to the fiscal year ending June 30, 1908?

A. Yes.

Q. So that we can illustrate either of them by the other?

A. Yes, sir.

Q. I will call your attention to Ex. 22. The first column gives the revenue actually earned upon the different commodities and characters of freight?

A. No, sir; not on all of the commodities.

Q. Well, now, what I want to get at is this: I understand that the first group on Ex. 22 gives the rates which were in effect prior to September 1, 1906?

A. Yes, sir; unless there might happen to have been some other reductions on these other commodities such as merchandise which we haven't taken any account of. That is what it would be practically, however.

Q. Then, do you mean it would be all through the exhibit that column 1 would give the rates which were in effect prior to September 1, 1906?

A. Yes, sir.

Q. But as a matter of fact, column 1 does not give the revenue which was actually received?

A. No, sir.

Q. Does column 2 give the revenue which was actually received?

A. No, sir.

Q. Then, nowhere upon Exhibits 21 or 22 is there a statement as to the amount actually received?

A. Not in a total; there is by the various items; for instance, there is the amount actually received on merchandise.

Q. You mean that by making another computation from Exhibits 21 and 22 you could ascertain the amount that was actually received?

A. I could from Exhibit 22; Ex. 22 covers the merchandise for the entire year at rates, for instance, which went into effect November 1, 1906. These statements are based on a year's business.

Q. So that in Ex. 21 you have based the rate upon merchandise at the rates fixed on September 1, 1906?

A. I based the rates on merchandise first on the rates effective prior to the reduction of November 15, 1906, second, on the rates after said reduction, but in both cases the rates are

applied to the tonnage for the entire year.

Q. Column 1 in Exhibits 21 and 22 gives the rates which would have been received if no change had been made in the rates from the 1st of July, 1906?

A. Yes, sir; or more properly, the first of September.

Q. But, of course, the fact is that neither the commodity rates nor the merchandise rates which were in force upon July 1, 1906, have been in force during the time covered by these exhibits?

A. The merchandise rates were made effective November 15, 1906.

Q. I say the rates that were in force on July 1st have not been in effect during the time covered by these exhibits.

A. No, they have not.

Q. Except that the old merchandise rates were in effect from the 1st of July to the 15th of November?

A. Yes, in the year ending June 30, 1907. That could be qualified further, the rates voluntarily reduced on grain were not made effective until September 1, 1906, and on coal October 22, 1906, in that particular year.

Q. Now, do we understand each other that column 1 is a statement of what the earnings would have been upon the rates in force July 1, 1906?

A. Yes, sir.

Q. At that time—on July 1, 1906,—there was pending before the Railroad & Warehouse Commission a hearing as to railroad rates on all the roads in Minnesota, was there not?

A. I presume there was; I don't know anything about it personally.

Q. Which resulted in the order of September 6th upon merchandise and the order of December 14, 1906, upon commodities, or do you remember that?

A. I don't remember; our order on the commodities is the rate law of April 18, 1907.

Q. While that hearing was pending, what you have described as a voluntary reduction in certain commodities was put into effect upon grain September 1, 1906, and upon coal October 22, 1906?

A. Those rates were voluntarily reduced on those dates.

Q. On the Great Northern, Soo and Northern Pacific roads?

A. I believe so.

Q. And that reduction wasn't made upon any other road in the state?

A. I think there were some reductions on other roads; however, I am not familiar with them.

Q. And column 2 shows what the earnings would have been if the rates as readjusted as you have described by what you call the voluntary action of the company had been in force during the period covered by the exhibits 21 and 22?

A. Yes, sir.

Q. But that column does not show the actual earnings from the rates which were in force?

A. In Ex. 22 it does show that information practically, Mr. O'Brien; that is, in connection with grain, cattle, lumber and coal, but not in connection with merchandise.

Q. Well, I am speaking of the column as an entirety.

Mr. BUTLER: There is no change in the merchandise, either.

A. In column 2 we show the old rates on the merchandise, and as the merchandise rates were in effect since November 15, 1906, I can't say that that is the actual earnings on merchandise in the year ending June 30, 1908.

Q. So that the total revenue shown at the bottom of column 2 is not the actual revenue received?

A Not as a total.

Q. Column 3 is a statement of what would have been earned if the rates fixed by the Commission and the rates fixed by Chapter 232 upon commodities had actually been in force dur-

ing the entire period covered by Exhibits 21 and 22?

A. Yes, sir.

Q. Column 4 is intended to show the difference between columns 1 and 2, is it?

A. Yes, sir.

Q. Column 5 is intended to show the difference between columns 3 and 2?

A. No, sir; columns 5 and 6 (which have afterwards been totaled at the bottom of the page) are the difference between the totals of columns 2 and 3.

Q. Column 5 is intended to show the difference which would be effected by the enforcement of Chapter 232, is it not?

A. Yes, sir; that is the commodity rate law of April 8, 1907.

Q. And that is made up of the difference appearing in these items in columns 2 and 3?

A. Yes, sir.

Q. So that the total enforced reduction in revenue on Minnesota business upon the Great Northern road which could have been brought about by the schedules in Chapter 232, if that law had been in force during the entire period covered by Ex. 21, would have been $85,571.69.

Mr. BUTLER: That is on the commodities.

WITNESS: On the commodities strictly intrastate in Minnesota.

Q. Chapter 232 only applies to commodities?

A. Yes, I say on the commodities, but that is the loss only on intrastate business in Minnesota.

Q. Now, you have computed that in addition to that the Great Northern road sustained a reduction in revenue from the operation of the Commission's order during the year ending June 30, 1907, of $170,002.64?

A. No, sir; that would have been the loss had the merchandise rate been effective July 1, 1906, instead of November 15, 1906, and the carload rates on groceries to the jobbing cen-

ters had been in effect July 1, 1906, instead of May 3, 1907.

Q Well, I thought that was all included in my question, Mr. Parker.

A. I thought you asked if that was our loss.

Q. Upon the assumption that that order was in effect during the entire year?

A. Yes, sir.

Q. And I intend by that to include the supplementary order (if that is the proper term to use) of May 3, 1907; we insist that there is only one order and that that order of May 3d is not a separate and independent order, and concede, of course, that in considering the effect of the Commission's order the effect of the order of May 3d is to be considered as well as all the balance of the order.

The MASTER: In connection with the order of September 6th?

Mr. BUTLER: Yes, there was one adjustment of the merchandise schedule.

The MASTER: It has no application to anything except the Western Classification?

Q. So that again calling your attention to Exhibit 21, upon the assumption that all of the freight rates in controversy in this action were in effect during the entire year ending June 30, 1907, they would have caused a loss in revenue to the Great Northern road, as compared with the rates which were in effect July 1, 1906, upon the intrastate freight transported by that road in Minnesota, $255,574.33?

A. Yes, sir.

Q. Now, as a matter of fact, some of those rates were in effect a part of the year and some were not?

A. Yes, sir.

Q. And this statement, Ex. 21, does not purport to show the true reduction in revenue brought about by the enforcement and operation of the order of the Commission during a

part of the year ending June 30, 1907?

A. No, sir.

Q. Ex. 22 covers a period during which there has been no change in rates in the state of Minnesota, does it not?

A. No change in these particular rates.

Q. So that we have here one complete year in which there has been no change in rates actually received?

A. Yes, no change on these particular commodities.

Q. Well, no change in the matters involved in this action?

A. Yes, sir.

The MASTER: Voluntary or otherwise?

Mr. O'BRIEN: Voluntary or otherwise.

A. Of course, in making that statement, there may have been some slight changes, but I am not aware of them. There possibly may have been some change throughout the entire state.

The MASTER: That is, here and there?

WITNESS: Yes, but I am not aware of any change; not of any moment.

Q. Of any moment?

A. No.

Q. Column 1 is based upon the rates which were in effect July 1, 1905?

A. Yes, sir.

Q. And therefore does not show any of the rates actually received?

A. No, sir.

The MASTER: Based on actual tonnage, though, I understand?

WITNESS: Yes, sir; based on tonnage.

Q. Yes, based on actual tonnage. Column 2 corresponds to column 2 in Ex. 21?

A. Yes, sir.

Q. Column 3 consists of the rates prescribed by Chapter 232

upon commodities, the merchandise rates prescribed by the order of the Commission, the latter being actually in force during all of that year?

A. Yes, sir.

Q. Column 4 gives the difference between columns 1 and 2?

A. Yes, sir.

Q. Columns 5 and 6 give the difference between columns 2 and 3?

A. Yes, sir.

Q. Assuming the correctness of the statement with reference to the merchandise shown in Ex. 22, the Great Northern road, during the year ending June 30, 1908, actually earned from the carriage of merchandise between stations in the state of Minnesota $178,978.96 less than it would have earned if the rates upon merchandise which were in force July 1, 1906, had been in force during the period covered by this exhibit?

A. Yes, sir; that includes the carload groceries to the jobbing centers.

Q. Well that includes everything in the Commission's order as we have spoken about it here?

A. Yes, sir.

Q. It is the total reduction which you claim upon freight business between stations in the state of Minnesota because of that order?

A. Yes, sir.

Q. And it is shown by column 5 of Ex. 22 that if during the same period the rates prescribed by Chapter 232 had been in force there would have been a reduction from the amount actually received of $87,261.43 during the period covered by Ex. 22?

A. Yes, sir; on intrastate business.

Q. So that if there were added to the reduction in revenue which you claim, the Great Northern road sustained during the year ending June 30, 1908, from the operation of the Commis-

sion's order, upon Minnesota business the further reduction which you say would have resulted from the enforcement of Chapter 232, the total loss or reduction in revenue to the Great Northern road from the transportation of freight between stations in the state of Minnesota would have amounted to $266,240.39?

A. Yes, sir; confining it to intrastate business.

Q. That is, considering only Minnesota intrastate business?

A. Yes, sir.

An adjournment was here taken until Tuesday morning, April 6, 1909, at 10 o'clock.

Federal building, St. Paul, Minn. Tuesday, April 6, 1909.

The hearing was resumed at 10 o'clock A. M.

FREDERICK H. PARKER,

recalled for further cross-examination, testified:

By Mr. O'BRIEN:

Q. Calling your attention to the statement from which you have read into the record, on page 5, under the heading "Merchandise," to what exhibits do the examples given in that page refer?

A. The first example between Minnesota points and eastern terminals, St. Paul, Minneapolis, Minnesota Transfer and Hamline transfer, refers to Ex. 22, strictly local to Minnesota or intrastate in Minnesota, and to Ex. 24, local interstate in Minnesota. The second example, "Between above terminals and points in states other than Minnesota affected by reduced rates," was applied in connection with Ex. 26 so far as business to and from eastern terminals, St. Paul Minneapolis, Minnesota Transfer and Hamline transfer are concerned, in connection with the same exhibit (26); the fourth example, "Between

Duluth and Superior and points in states other than Minnesota affected by reduced rates" was applied to the business between those terminals and points in states other than Minnesota affected by the reduced rates; the third example, "Between Duluth and Superior and points in Minnesota," was applied to business between the same points, per exhibit 28.

Q. Those examples furnished on the fifth page of the memorandum to which I have referred have reference only to merchandise in less than carload lots?

A. Yes, sir.

Q. Are you sure that they refer only to merchandise in less than carload lots?

A. Yes, sir.

Q. You know that the order of the Commission includes carload lots as well as less than carload lots?

A. I don't think it includes carload lots, as we term them, that take a carload rating; there are very few exceptions, possibly.

Q. Well, the Western Classification includes carload lots, does it not?

A. Yes, sir.

Q. And the order is as broad as the Western Classification?

A. Well, this merchandise order refers to class rates, and practically all Class rates are less than carload shipments; that is, they are practically; there may be a very few exceptions to that rule, but in most carload shipments commodity rates are quoted.

Q. However, you think these examples are taken from the actual transactions so that this wouldn't make any difference?

A. Well, we felt that that was a fair basis, taking all the l. c. l. business handled in those particular territories, comparing the two months combined with the year, and forming a percentage to apply to the actual figures compiled for the two months.

Q. As I understand, in arriving at the total loss or reduction which you claim would occur in merchandise, you took the tonnage, for instance, for the year ending June 30, 1907, then you ascertained the total tonnage for the months of July, 1907, and April, 1908?

A. Yes.

Q. And ascertained what percentage of the year's business was transacted in those two months?

A. We ascertained what percentage the business transacted in those two months bore to the business transacted in the year in question.

Q. Well, that is the same thing, isn't it; what percentage of the business, (of the class business) you are referring to was transacted in those two months?

A. Well, as you put your question, Mr. O'Brien, those two months don't happen to be in the year ending June 30, 1907, so that no portion of the business transacted in the year ending June 30, 1907, moved in July, 1907, or April, 1908. However, we ascertained the percentage that the particular business transacted in July, 1907, and April, 1908, bore to the same kind of business transacted during the year ending June 30, 1907; when it comes to the year ending June 30, 1908, the same basis was used, excepting that of course those two months were in the second year.

Q. Having ascertained that, you then ascertained the total loss occurring in the months of July and April?

A. We ascertained the loss under different headings; for instance, we ascertained the loss strictly local to Minnesota, the loss between eastern terminals and states other than Minnesota affected, and so on, applying the appropriate per cent to those totals to arrive at the corresponding figures for the year.

Q. And having ascertained what you considered the total loss in those two months, you took that to be the same percentage of the loss for the year in that particular character of busi-

ness which the total business for July and April bore to the total year being considered?

A. Yes, sir.

Q. Mr. Parker, you said a while ago that this was merchandise business, "l. c. l." business, you said?

A. Yes, sir.

Q. By "l. c. l." business you mean less than carloads?

A. Yes, sir.

Q. Well, now, as a matter of fact, a large portion of the merchandise business is in carload lots, is it not, or do you know about that?

A. I don't think it is, Mr. O'Brien. That takes these class rates. As I say, there may be some, but not a large portion of it.

Q. For instance, there are ten classes in the Western Classification?

A. Yes, sir.

Q. The last six classes after the fourth class, they are all carload lots, aren't they?

A. Yes, sir; but there are a great many commodity rates quoted which take them out of the class rates.

Q. Oh, yes, there are a great many commodity rates, but at the same time there is a great deal of freight carried under the last six classes?

A. Yes, but we figure that the less than carload business between these particular points would be a proper barometer. you might say, to get at the business for the year on the percentage basis.

Q. Well, you didn't consider the entire tonnage, you only considered the l. c. l. business?

A. Yes, sir.

Q. So that these tables are not based upon the entire transactions even for the months of July and April?

A. For the months of July and April we compiled all the business subject to the order. If the order affected any of the

business which would be handled in carload lots, it was applied for those months.

Q. Well, for the entire year, referring again to the example in table 5, what did you consider for the entire year?

A. The l. c. l. business for the entire year and for those two months in connection with compiling the percentage; the figures on page 5 are on the same basis for the year and for the two months, in order to strike an average.

Q. And both of those are upon the l. c. l. business?

A. Yes, sir.

Q. They include no other business?

A. No, sir.

Q. Now, of course it is true that it doesn't make any difference how many elements you eliminate; what you are endeavoring to do is to arrive at a ratio. If the relatively same amount is eliminated from each side, your ratio will still be correct?

A. That is the theory; yes, sir.

Q. And so you considered that if you took into consideration only l. c. l. business you would arrive at the proper ratio?

A. Yes, sir.

Q. But you don't know whether that is true or not?

A. Well, of course, I can't say that it is true, but I think it is as accurate as the business could be compiled on the basis of any two months.

Q. Did you ever make a compilation upon the total business?

A. No, sir; the total business would not be accurate; we would have all sorts of shipments in it handled under commodity rates. This table or these examples were compiled merely as to just our merchandise business; it was not applied to any of the commodities.

Q. Well, it was not applied to all of the freight covered by the Commission's order and which actually moved under the rates fixed by the Commission's order, was it?

A. When we compiled the actual losses for July, 1907, and April, 1908, we included—

Q. Yes, of course when you came to your losses you included it all, I am sure of that, but I am after the ratio.

Mr. BUTLER: Well, let him finish, Mr. O'Brien.

Mr. O'BRIEN: I think he has said that, Mr. Butler.

Q. You say that when you came to the losses you included all of the business?

A. Yes, sir; all business under this merchandise order, as we call it.

Q. Yes, but when you were arriving at the ratio you did not include all business which moved under those Class rates?

A. No, sir; I might explain, Mr. O'Brien, if I may, that our station agents' abstracts show carload business separate from less than carloads; we were, therefore, able to compile the l. c. l. business between these various territories from the abstracts without referring to the way-bills. Had we attempted to take in the carload business, we would have had to go through the way-bills for twenty-four months.

Q. You did not take into consideration all of the business which moved under the Class rates?

A. Not the carloads, in getting at the percentage.

Q. And you are unable to state what effect that omission has upon the percentage which you have found here?

A. I am of the opinion that it would not have any appreciable effect on it, for the reason that the carload business was omitted from the two months in question as well as from the year.

Q. But you don't know whether it would have any difference or not?

A. I do not know, excepting as a matter of judgment.

Q. If you never have made that computation, how can you have any judgment upon it?

A. Well, those two months were fairly representative months.

Q. Yes, but you did not include all of the business of these two months?

A. If they are fairly representative months, it would be assumed that the proportion of the carload business handled under Class rates would be relatively the same in those two months as for the year.

Q. That is true, but when you did not take into consideration the carload business, you cannot say that the percentage which you arrived at is correct?

A. I can only say that it is correct in my judgment.

Q. Even if it was correct as applied to April and July, those are not typical months, are they?

A. As I stated, they were considered fairly representative months; in fact, we at first intended to base the year on the month of July, but afterwards under advice of counsel we included another month, as we found it had been customary for the various roads to base their figures on two months.

Q. Under whose advice did you omit the carload shipments?

A. I did not have any advice on that.

Q. That was a matter of your own judgment, Mr. Parker?

A. It was really a matter of saving a great deal of time, Mr. O'Brien; as I stated before, we obtained these figures from the abstracts.

Q. Didn't we agree yesterday that October and April were the typical months, the characteristic months?

A. Yes, sir; in connection with commodities.

Q. Well, wouldn't they also be in connection with merchandise?

A. They probably would, but figuring on this percentage basis my opinion is that it would make very little difference what months you used as long as they were somewhere near that period.

Q. There is less difference between the old carload rates and the Commission's rates than there is between the l. c. l. rates, is there not?

A. Not to my knowledge; I am not familiar with that.

Q. For instance, the Commission actually raised the rate upon the sixth class or Class A, which is carloads; did you know that?

A. No, sir.

Mr. BUTLER: Well, is that so?

Mr. O'BRIEN: Either raised it, or maintained it the same.

Mr. BUTLER: Wasn't it simply raising the relation of the percentage?

Mr. O'BRIEN: My recollection is it was higher, and no drop in it.

Commissioner STAPLES: The relation is raised five per cent.

Mr. BUTLER: The relation is raised five per cent, but the rate is lower, itself?

Commissioner STAPLES: It might be lower in some instances, and it might be higher in some instances, but the relation is always five per cent higher than it was before.

Q. You didn't know that?

A. No, sir.

Q. Now, if there were a considerable quantity of merchandise moving under Class rates, which in October were transported in carload lots, but that the shipments in July were light and less than carload lots it would make a good deal of difference whether you selected July or October?

A. I don't think it would, Mr. O'Brien, when you figure that we based this on a percentage of the year.

Q. Well, of course your whole problem rests upon the theory that when you found the total loss in July and April and found the relation which the business of July and April bore to the entire year's business, all you had to do was to apply the total loss to the relation, or vice versa, to get the loss for the year?

A. Yes, sir; we applied the percentages to the loss for the two months.

Q. Now, in order that that computation or conclusion should

be correct, the business of July and April must have been typical or characteristic or average in its character? Let me illustrate that: Supposing now the heaviest loss or the greatest reduction made by the order of the Commission was on silk in less than carload lots; if during July you had a disproportionate or large amount of silk shipped, in that way, your loss would be very heavy for that month, wouldn't it?

A. Yes.

Q. Then if you found that the total business of July was ten per cent of the total business for the year and you multiplied the July loss by ten, you would get the total loss for the year on the theory used by you in framing these tables?

A. Yes.

Q. But if July shipments were not typical, if July's loss was not an average loss, your conclusion would be out of plumb just the same degree?

A. Well, if July was not an average month, it would have the same relation on these percentages as it would on the revenue, compared with the year.

Q. Now, don't you think that the person who determined what months to take ought to be familiar with the character of the business transacted during that month and ought to be familiar with the table of rates provided by the Commission's order?

A. I don't see how anybody could become familiar with all that, Mr. O'Brien, without compiling it.

Q. Well, they certainly could become familiar with the general character of the traffic during certain months, and they certainly could become familiar with the Commission's table of rates so as to know whether or not the loss was heavier during the months in which light freight moved, or during the months in which heavy freight moved?

A. Well, I stated before, Mr. O'Brien, that by comparing totals we figured that July was a representative month and in-

tended to base our figures on it.

Q. But what I say is, Mr. Parker, that if you don't know what the Commission's rates were, what relation the different classes bear to each other, and don't determine what effect that would have upon the character of freight moved in any one month, your opinion as to whether the month is a proper month or not may be wrong. Now, I am not questioning your good faith in this matter for an instant; I don't want to say anything unpleasant, but I am just pointing out these things to you. Isn't that true, that if you are not familiar with the relation which the different rates bear to each other and the effect that that has upon the character of freight moved in any one month, your opinion as to whether that month is typical or not hasn't sufficient basis? You would not be justified in expressing an opinion upon that?

A. Well, I know in a general way Mr. O'Brien, how the business compares for different months, but I don't think anybody connected with the road could say how various class rates would move in different months. On your theory it would be necessary to compile the statement for twenty-four months.

Q. Now, I want to know why it was that July and April were taken in this instance and April and October were taken in the other instance.

A. Why, reading from my testimony of yesterday, when we first started to compile the statements in connection with the Minnesota rate case, the way-bills for July, 1907, had just been audited, and without further assorting were in proper order to prepare the required information; that is, way-bills from each station to each other station were assorted in separate lots, which meant a great saving in time; then, so far as totals were concerned, we figured that July was a fairly average month, intending to base our figures for the whole year on it. Afterwards one of our counsel (I think it was Mr. Holden) stated that the other roads were using two months, and in order

to save reworking the figures for a month, which on merchandise business costs something over a thousand dollars, we compiled one month more and combined it with July, figuring that that would be fair for both sides.

Q. You think July is a fairer month on the merchandise—

A. Yes, sir.

Q. —than October would be?

A. Not necessarily any fairer, Mr. O'Brien.

Q. Well, a more characteristic month?

A. No, sir; I should think that either one on this percentage basis would be fair.

Q. And that selection of July, then, was a matter of just chance, just because you happened to be on those way-bills?

A. It wasn't altogether chance, Mr. O'Brien; we had the way-bills in shape and considered that it was a fairly representative month for the entire year.

Q. Were not the waybills of all the previous months in the same shape? They were filed away in the same way, were they not?

A. No, sir; those way-bills were assorted from certain stations to certain stations, just as we had gotten through comparing them on our abstracts; they had just been audited.

Q. Well, they were audited and prepared to be filed away, weren't they?

A. No, sir; you might say that they had been audited, but not reassorted and into forwarded order. When our way-bills are placed on file, all the way-bills from Minnesota Transfer, for illustration, are in numerical order regardless of their destination.

Q. How long would it have taken a boy to have reassorted the way-bills for October, so as to get them in the same condition that these way-bills for July were?

A. Why, it would probably take a boy between six and eight months.

Q. To sort the way-bills?

A. Yes, sir; we have about eight boys on that work, and I imagine they could have done that in a little less than a month.

Q. Eight boys to keep the work going?

A. Yes, sir.

Q. Just the mere assorting of them?

A. Yes, sir.

Q. Don't they check them or anything of that sort?

A. No, sir.

Q. Do nothing but assort them?

A. Yes, sir.

Q. Now, that is when they come in from the stations without any order at all, just as they happen to come in?

A. They come in, of course, in "received order," each receiving station sends the way-bills in.

Q. Yes, but I mean without any reference to each other, they are not at all arranged in any order after they are received by you?

A. No, sir.

Q. Now, after they have been assorted by these boys and put away they are in order, are they not?

A. When they are finally through with them they are in forwarded order and numerical order, without regard to destination.

Q. The reassorting of them would be a comparatively small work, would it not?

A. Yes, sir; but I wish to say that these way-bills had been —before we started this last statement these way-bills had been rated; that is, the old and new rates had been applied to them.

Q. Now, the l. c. l. business would naturally be larger in July than it would in October, would it not?

A. No, sir; I think they would run along about the same; that is, of course, the carload business in October would be higher, comparatively, when you figure on your commodities,

wheat, etc., but not as regards merchandise.

Q. And in this statement you excluded all of the carload business, you only included the l. c. l. business?

A. Yes, sir.

Q. And the selection of the month of July you say was a mere chance?

A. No, sir; not a mere chance as I previously stated; that was part of the circumstances, however.

Q. If you had commenced this work about in October you think you would have selected the previous month in the same way?

A. We would have first figured to see whether it was a fairly representative month.

Q. Now, all of the losses upon merchandise estimated in these tables from Exhibits 21 to 28 are arrived at in the same way?

A. Yes, sir.

Q. Upon each class of business. And so far as Exhibits 21 and 22 are concerned, the merchandise was not transported upon the rates assumed; you have taken merchandise and computed the old rates and found the difference between the rate actually earned; and the old rate, for instance, in Ex. 21 was $170,002.64, and in Ex. 22, $178,978.96?

A. Those figures are based on the business for the two years at the old and new rates. The reduced rates on merchandise were actually in effect during most of the time. However, the statements cover the entire year's business at the old and new rates.

Q. Exhibits 23 and 24 are similar, the first referring to the year ending June 30, 1907, and the second to June 30, 1908?

A. Yes, sir.

Q. So an explanation of one is an explanation of both?

A. Yes, sir.

Q. We will follow down the year 1908. That is what you

claim would be the reduction in revenue upon business handled by the Great Northern railway between points in Minnesota, but which originated or terminated on foreign lines in other states?

A. Yes, sir.

Q. Now, so far as commodities are concerned or the losses or reductions shown in the fifth column, that is exclusively a prophecy, the rates have not been changed and none of these reductions have been made?

A. None of those reductions in the fifth column have been made.

Mr. BUTLER: That relates to commodities?

Mr. O'BRIEN: Yes, that relates to commodities.

Q. So that so far as that is concerned, it is a mere prediction as to what you would do if the rates of Chapter 232 were in force?

A. Yes, sir.

Q. Column 6 shows a loss in revenue upon merchandise of $54 537.14?

A. Yes, sir.

Q. As a matter of fact, have any of the rates charged by the Great Northern road between points in Minnesota and points outside of the state been changed since September 1, 1906?

A. The merchandise rates were reduced November 15, 1906, and the supplementary order, as I believe you term it, referring to the carload groceries to jobbing centers—

Q. You are now referring to the date of the Commission's order in Minnesota; we know that, but I say have any of your merchandise rates between points in Minnesota and points outside of the state been changed?

A. That is what I was explaining, Mr. O'Brien.

The MASTER: Interstate business, you understand; this only applies to the intrastate business.

A. The rates on merchandise were changed November 15, 1906, on intrastate and interstate business. I am not familiar with the grading of the rates, but the reductions ordered in Minnesota made it necessary to reduce in connection with business to and from adjoining states. The same applies in connection with rates on carload groceries to jobbing centers, which were reduced May 3, 1907, both on intrastate and interstate business.

Q. Your rates were changed?

A. Yes, sir.

Q. On interstate business?

A. Yes, sir.

Q. How far beyond the Minnesota line?

A. They would grade up to different points, some of them run pretty well across the state of North Dakota.

Q. Do you know where they were changed to?

A. Well, we have tariffs on that, Mr. O'Brien; I couldn't say right here, but the tariffs will show it.

Q. You don't know about that?

A. I know that we have the tariffs.

Q. I say you don't know the details of it?

A. No, sir.

Q. Now, this statement, then, is based upon the rates which were in force prior to the Commission's order so far as merchandise is concerned, and the rates which have been in force and actually charged since that time?

A. Yes, sir.

Q. And from that source or from that cause in 1908 you claim a loss of $54,537.14?

A. On local interstate, as we term it.

Q. And if to that should be added the $20,330.19 upon commodities, you would have a total reduction in revenue of $74,867.33?

A. On local interstate, in Minnesota.

Q. And if that amount is proper to be considered by the Court in considering these rates, it is to be added to the amount claimed by you as the direct loss upon intrastate business as shown in Ex. 22?

A. That is one of the amounts which should be added to it; there is also the loss on strictly interstate.

Q. Oh, we will come to that. Exhibits 25 and 26 are similar in their form and refer respectively to the years ending June 30, 1907, and June 30, 1908?

A. Yes, sir.

Q. And are intended to show reduction in freight revenue from freight handled by Great Northern railway between Minnesota and other states, exclusive of business between Duluth and Superior and stations in Minnesota?

A. Yes, sir.

Q. As to the amounts shown in column 5 aggregating $63,020.40, those amounts constitute what you predict the reduction will be?

A. Yes, sir.

Q. Now, how about the amounts shown in column 6? Have reductions to that amount actually occurred upon that class of business?

A. Yes, sir.

Q. Or do you claim that that also would result?

A. Those tariffs were actually put in effect, Mr. O'Brien.

Q. Did you make these computations yourself from those tariffs?

A. No, sir; they were made under my personal supervision.

Q. Well, of course, I meant that; were they made under your personal supervision?

A. Yes, sir.

Q. And are based upon the actual tonnage?

A. Yes, sir; as explained in connection with those examples.

Q. You haven't got here the amount of actual reduction

which you claim occurred in July and April?

A. No, sir.

Q. Upon that particular class of business?

A. No, sir.

Q. But whatever amount you did ascertain upon the class of business described in the caption here as having occurred in July and April, you took that to be 18.59 per cent of the total loss for the year?

A. So far as eastern terminals, St. Paul, Minneapolis, etc., are concerned, and 20 per cent in connection with business between Duluth and Superior and points in states other than Minnesota. I would like to add that those per cents apply to the year ending June 30, 1908.

Q. Exhibits 27 and 28 are similar, applying respectively to the year ending June 30, 1907, and June 30, 1908?

A. Yes, sir.

Q. And are intended to show the reduction in freight revenues sustained by the Great Northern Railway Company upon freight transported between Duluth and Superior and stations in Minnesota?

A. Yes, sir.

Q. State whether or not that includes the business transacted between Duluth and Superior and the Twin Cities.

A. Yes, sir; if there were any reductions on it.

Q. Well, were there?

A. Well, there probably were on some of the items, I think there was not on coal.

Q. What was your rate on wheat, for instance, between the Twin Cities and Duluth?

A. I don't know whether that rate was affected or not.

Q. Well, do you know what it is?

A. No, sir; I can't recollect it now. I might add that if any of the rates, say between Duluth and the Twin Cities, were not affected, if they had been previously lowered they

were omitted from both sides of the statement, were not included at all.

The MASTER: This only includes affected business?

WITNESS: Yes, sir.

Q. All the business referred to in Exhibits 27 and 28 is interstate?

A. Yes, sir.

Q. And it may include business between the Twin Cities and Superior and Duluth if, as a matter of fact, any reduction in those rates was made?

A. Yes, sir.

Q. Is the loss shown in column 6 of Ex. 28 based upon actual rates?

A. Yes, sir.

Q. Those in force prior to September 1, 1906, and those in force during the year ending June 30, 1908?

A. The figures in column 6 show the loss between the rates on merchandise effective prior to November 15, 1906, and those made effective that date and the loss on carload groceries to jobbing centers before and after May 3, 1907.

Q. In all of these exhibits from Ex. 21 to Ex. 28, insofar as they refer to the year 1907 they do not give the actual facts, but it is all upon the assumption of the rates having been in force during all of that year?

A. Yes, sir.

Q. And in the exhibits given for 1908, those do assume to give the actual result of the operation of the merchandise rates during the year ending June 30, 1908?

A. Yes, sir.

Q. —and what would have been the result of the operation of the rates or the enforcement of the rates specified in Chapter 232—

A. Yes, sir.

Q. —if they had been in force?

A. Yes.

The MASTER: Do I understand that the supplemental order of May 3, 1907, was put in force by the railroad companies?

Mr. BUTLER: Yes.

WITNESS: Yes, sir.

Mr. BUTLER: That was not restrained by the injunction.

Attorney General YOUNG: It was accepted at the time it was made and was not restrained.

Q. I now call your attention to Ex. 29. In that exhibit you have taken the total freight business of the Great Northern road, or the total interstate freight business of the Great Northern road,—which?

A. That includes the total freight revenue of the entire line excluding intrastate business in Minnesota.

The MASTER: That is, all interstate business on the whole system?

WITNESS: And local to all states other than Minnesota. My answer was, excluding Minnesota's intrastate business.

Q. Mr. Parker, I am inclined to think that the heading to Ex. 29 is just a little bit confusing; please state whether or not this is what that exhibit shows: the entire freight revenue received by the Great Northern Railway Company in the years ending respectively June 30, 1907, and June 30, 1908, except the revenue derived from intrastate business in the state of Minnesota.

A. Yes, sir.

Q. You have taken the percentage of loss or reduction which you have shown in a previous exhibit and applied it to all of this other revenue?

A. Yes, sir.

Q. And in that manner have computed the gross loss or reduction shown in Ex. 29?

A. Yes, sir.

Q. You have done that without reference to any of the rates upon which this revenue was earned?

A. I don't understand your question, Mr. O'Brien.

Q. You have not taken into consideration, in making this computation, what the rates were upon which the revenue was earned?

A. No, sir.

Q. Utterly immaterial as to whether the rate was above or below the Minnesota rate for the purposes of your computation—

A. Immaterial.

Q. —and also immaterial whether the cost of the service was above or below?

A. The cost did not enter into the statement.

Q. Did not enter into it. It was simply a mere mathematical computation of applying certain percentages arrived at in a certain manner to certain gross totals?

A. Yes, sir.

Q. And it was not done by you under the claim that it shows any actual existing fact or any actual result which could be brought about?

A. The theory of the statement, Mr. O'Brien, is that if the same percentage of reduction was made on the rest of our business as was made on our intrastate in Minnesota, that loss would result.

Q. In other words, it shows this: if all of the business of the Great Northern road outside of Minnesota business was transacted at reasonable rates but the Minnesota business was transacted at a rate that was twenty-five per cent in excess of a reasonable rate, if you reduced the Minnesota rate twenty-five per cent and applied the same reduction to all of the other business, you would get a much larger gross reduction than you would if you confined it to the Minnesota business?

A. Why, I believe the theory was that our rates are supposed to be lined up, and if that much reduction is made in Minnesota it might be argued that you might make it elsewhere.

Q. Of course, if you applied the same percentage of reduction to the entire freight revenues of all of the railroads in the United States, it might produce the confiscation of all the roads, mightn't it,—you don't know that?

A. I presume it might.

Q. You said that you believed it was assumed that the rates were relatively the same and that if a reduction could be made in Minnesota a reduction could be made elsewhere—did I understand you correctly?

A. I merely assumed that, Mr. O'Brien. I don't know how the rates compare, but I just stated that in explaining the theory of the statement.

Q. But the statement is not prepared upon your theory, is it? You didn't originate this idea?

A. No, sir.

Q. You were instructed to prepare a statement—

A. Counsel asked for that statement.

Q. —upon a certain theory, and what the fact is with regard to the rates you have no idea?

A. No, sir.

Q. Or how they compare with each other, or anything of that sort?

A. No, sir.

Q. Does this include a loss which would result in revenue from the transportation of merchandise?

A. Yes, sir; this per cent of reduction is putting all the commodities and merchandise together and merely forming one per cent on the whole—merely an arbitrary per cent of the whole reduction.

Q. Well, you have had the merchandise rates in effect now for very nearly two years and a half.

A. That was taken into consideration, Mr. O'Brien. We did not make a second reduction on already-reduced rates, I added those on before I applied the reduction.

Q. No, but you applied the reduction much further than is shown in Exhibits 24 to 28?

A. I don't understand your question. This reduction, of course, was applied all over the line.

Q. Yes. Now, in Exhibits 24, 26 and 28 you assume to give the actual reduction in revenue upon interstate business which the Great Northern road has sustained by reason of the application and extension of the order of the Commission, don't you?

A. Yes, sir.

Q. In Ex. 29 you bring in a great deal larger amount as a reduction which would be sustained, upon the theory explained in Ex. 29, don't you?

A. Yes, sir.

Q. What I want to know, Mr. Parker, is this,—why, when you have had the rates in operation for two years on merchandise and are able to and actually do present a statement to the Master which shows the actual result of the operation of those rates as you claim it to have been, you then prepared Ex. 29, which is purely imaginary and is contradictory of the facts and occurrences which have taken place during the past thirty months—of what benefit is that to the Master that you can see?

A. I prepared the statement under instructions from counsel.

Q. But why should that be done?

Mr. BUTLER: Let me suggest, Mr. O'Brien, that Mr. Parker has nothing to do with that. I suppose the reason in the mind of counsel was this: In Smyth v. Ames, the Supreme Court of the United States did that thing, and we give to the Court the benefit of the figures. Mr. Parker has not claimed, and I will say, if it will help clear the matter up, as far as his examination is concerned, the exhibit does not purport to claim that the total amount of reduction resulting from the application of the percentage to the whole freight earnings has

been or will be made absolutely coercive and essential; it is to present to the Master what the aggregate reduction would be upon the assumption taken. We think Smyth v. Ames did that very thing, and we feel bound to give the Master the figures which would result from the application of the rule of that rate case.

The MASTER: Objection noted.

Mr. BUTLER: I did not intend to object; I intended to make the statement, that it might be understood.

The MASTER: The statement is here.

Q. Did you answer the last question?

A. Mr. Butler answered that.

Q. You desire to adopt Mr. Butler's answer as yours?

A. Yes.

Q. This Ex. 29, as you understand it, was framed to exhibit one of the conditions which you understand has been considered by the court?

A. I presume so.

Q. Now, have you examined the Minnesota schedules as found in the order of the Commission for the purpose of determining whether or not one regular percentage of reduction has been made by those schedules, or whether in some cases higher rates are permitted than you actually charged upon your road; in other cases a very small amount of reduction is made, while in other cases a very substantial cut is made in the rates; have you examined them for that purpose?

A. I know in a general way that that is the case, Mr. O'Brien, but I have not personally examined them on those lines.

Q. And of course in no case do they reach, unless possibly on coal, or something of that sort, such rates as you maintained in particular instances upon commodities?

A. I don't believe I understand you, Mr. O'Brien.

Q. In Ex. 29 you assume that the revenue from the carriage

of iron ore must be reduced what per cent?

A. There are four per cents there, on different bases; that is two for each year.

Q. Which would include iron ore?

A. Either of them. The first is on the basis of percentage of reduction on the commodities affected in Minnesota, 14.38 per cent for 1907; the second is on the basis of the reduction on merchandise and commodities locally to Minnesota applied to all of the business local in Minnesota, some of which would not be affected by the rates in question, which gives 10.15 per cent.

Q. That is made up by taking the total affected by the merchandise order upon traffic in Minnesota?

A. Merchandise and commodities.

Q. Merchandise and commodities, but is not at all based upon the theory upon which those schedules are based?

A. Not at all.

Q. Because the schedules do not provide for a level cut?

A. Based on the total.

Q. The schedules provide, as I have said, for a small cut in some instances, an increase in some cases, and a substantial cut in others; is that true?

A. Based on the total reduction, one to the business affected and one to all the local business in Minnesota including the business not affected.

Q. Well, now, don't you think it rather useless to present a table here stating what the amount of reduction on iron ore would be—that that was cut 14 per cent—as illustrating any fact?

A. Well, I can't say as to that, Mr. O'Brien.

Q. Well, you are a practical railroad man; you don't think that Ex. 29 presents any practical fact, do you?

A. It merely presents what is stated in the heading; it would be a horizontal reduction of so much per cent from the

rates now in effect on all commodities.

Q. It states what a horizontal cut would amount to?

A. Yes, sir.

Q. But so far as any practical lesson to be drawn from Ex. 29, you might just as well have made that 25 per cent or 50 per cent? It is purely abstract?

A. There is a basis for our per cents, Mr. O'Brien.

Q. It is a purely abstract calculation, isn't it?

A. Of course the use to be made of this is something I am not aware of; that is for the counsel.

Q. Can you see any practical value in it?

A. Why, it shows that a horizontal cut on the same proportions as the cut in Minnesota would be.

Q. Wouldn't it be of just as much practical value if you had made that 25 per cent?

A. No, sir; there would be no theory for a 25 per cent.

Q. You think that it has some practical value?

A. Why, the figures speak for themselves, Mr. O'Brien. There really was on this first item a reduction of 14.38 per cent on commodities affected in one total.

Q. You think it stands upon the same basis as these other exhibits, exhibits 24, 26 and 28?

A. Well, it may not stand on the same basis. Those are supposed to give those that we know of. This is a theory.

Q. Well, I want to get your own view-point of this, as to whether you claim this shows any practical fact or theory which is of any avail to us or anybody else in determining this case.

A. Why, it merely shows the effect that would be produced by applying that same percentage of reduction on the balance of our business.

Q. It would be just as interesting and just as valuable if you had taken the arbitrary figure of 50 per cent reduction and seen how much that would amount to?

A. No, I can't agree with you there, Mr. O'Brien. As I stated, there is a basis for this. You might consider it an arbitrary basis, but there is a basis for it.

Q. As a mental exercise or as a mathematical problem to drill a boy on it may be entirely valuable, but as a practical fact it has no bearing in this case?

A. Well, I compiled that statement myself, Mr. O'Brien.

Q. I have no doubt that the mental exertion was very good for you, but is it of any value in determining a rate question that you can see?

A. Merely as I stated before, it shows the result of a horizontal cut at so much per cent.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. Continuing as to Ex. 29, and taking the second column, business of 1908, 14.80 per cent is the average reduction which would be produced by chapter 232 and the order of the Commission on Minnesota intrastate business, which would be affected by those rates; that is business which prior to the establishment of those rates was carried at a higher amount?

A. Yes, sir.

Q. And by using that percentage upon all of the freight revenue of the road for 1908 except that which is strictly intrastate in the state of Minnesota, you find that the total reduction would be $5,650,673.27?

A. Yes, sir.

Q. Then if you would take the total reduction, computed as above, you find that that is 11.25 per cent of all the Minnesota intrastate business?

A. No, sir; the 11.25 per cent is arrived at by applying the loss on the intrastate to Minnesota commodities affected by the various reductions to the total intrastate business in Min-

nesota, which total would include business not affected by the various rate reductions.

Q. Well, that is what I say. Having ascertained by a direct computation or direct examination of the way-bills for the months of April and October what the net loss or reduction would be in Minnesota, you then ascertained what percentage of the total Minnesota intrastate business that net loss or reduction was?

A. Yes, sir.

Q. And found that it was 11.25 per cent?

A. Yes, sir.

Q. And applying that percentage to the balance of the freight revenue in the same way as we did with the last percentage, you find that it would amount to $4,269,710.52?

A. Yes, sir.

Q. In preparing that you exercised no discretion in the matter at all, did you? you simply made those computations as you were requested?

A. I made those computations personally, as I explained.

Q. But I mean you simply did it at the direction of some one else?

A. Yes, sir.

Q. And what it shows and what its effect is you don't know?

A. I know what it shows; as I previously explained, it would show that much of a loss on the basis of a horizontal reduction similar to the reduction in Minnesota.

Q. But what bearing it has in this case you don't know, nor you didn't exercise any discretion in that matter?

A. No, sir.

Q. Ex. 30 is a statement showing tons carried one mile and the revenue produced from such carriage, under the different circumstances stated in the exhibit for the years 1907 and 1908 respectively?

A. Yes, sir; that is made on the basis of the actual earnings

in those years, taken from our statistical records.

Q. And of course for the year 1908, insofar as it shows earnings upon Minnesota business, they are the earnings based upon the rates actually in existence which included the rates fixed by the order of the Commission?

A. Yes, sir.

Q. So that from the revenue shown in Ex. 30 there is no deduction to be made on account of the enforcement of the Commission's order?

A. No, sir.

Mr. BUTLER: As respects 1908, or both years is that?

WITNESS: That applies to both years.

Q. Well, does it apply in its entirety to both years if it is based on the actual revenue, because some portion of the year 1907 you received a higher rate?

A. Yes, prior to November 15, 1907.

Mr. BUTLER: From July 1st to November 15.

Q. So that it is not shown as to 1907 what portion of the revenue was earned on the old rates and what portion on the new rates?

A. No, sir; this is on the basis of the actual business done at the rates in effect in both years.

Q. So far as the year 1908 is concerned it includes the reduction produced by the Commission's order?

A. Yes, sir.

Q. Calling your attention to Ex. 33, the first division of that "Local to Minnesota, handled wholly within that state," what class of business does that refer to?

A. That refers to all intra-state freight business in Minnesota for the year ending June 30, 1908.

Q. And the second subdivision?

A. Is the same information, covering Minnesota's proportion of interstate freight, including what we term local interstate.

Q. And the third is the sum of the two preceding ones?

A. Yes, sir.

Q. Exs. 32 and 33 are similar, being respectively for the year 1907 and the year 1908?

A. Yes, sir.

Q. Now, I call your attention to Ex. 34; does Ex. 34 contain a statement of the entire freight business transacted in the state of Minnesota?

A. No, sir.

Q. There are certain portions of the lines that are not included?

A. Yes, sir; the statement shows the territories, the detailed pages 1, 2 and 3.

Q. Why did you omit any of the territory?

A. This statement includes all of the main lines in Minnesota and practically all of the branches with the exception of the Mesaba division. The purpose of the statement is to show the comparison of the forwarded and received business and the station expenses during the years 1902 to 1908.

Q. But why did you not include the entire transactions of the road?

A. Of the state do you mean?

Q. Yes, in the state.

A. Well, it was not considered that the Mesaba division would have any particular effect on this case; for instance, a mine might open up in the year 1907 which would increase the shipments out of that territory and not give a comparison of the other business for the periods in question.

Q. Are there any other places omitted from the statement besides those located on the Mesaba division?

A. The statement appears to omit the entire north portion of the state, that is, from the Mesaba division right across the northern part of the state.

Q. Right across the northern part of the state to the Dakota line?

A. Yes, sir.

Q. Do you know why that was omitted?

A. No, sir.

Q. You simply compiled this statement from the data furnished to you?

A. Yes, sir.

Q. And included the divisions which were furnished you?

A. Yes, sir.

Q. And omitted all those which you were instructed to omit?

A. Well, I just gave them what they asked for.

Q. What those other places show or do not show you do not know?

A. No, with the exception of the Mesaba division, they probably show the same general run of business.

Q. Or what relative bearing they have upon the matters involved in this case you don't know?

A. No, sir.

Q. You truthfully and correctly furnished the information with regard to the particular places that you were told to furnish it for?

A. Yes, sir.

Q. Is that it, Mr. Parker?

A. Yes, sir.

Q. And why the statement is prepared in its present form, what information is to be derived from it, or what calculation is to be based upon it you don't know?

A. Well, I only know in a general way that—

Q. That it is to be used in the rate case?

A. I know in a general way that it shows that our earnings have gradually decreased from year to year while the expenses have increased.

Q. At those places named?

A. Yes, sir; that probably includes three-quarters of our mileage in Minnesota.

Q. Can you take this Ex. 34 and point out what lines have been omitted?

A. The portion of the line from Duluth across the northern part of the state to Crookston, and the line north of Crookston to St. Vincent and Greenbush are not included in the statement.

Q. And how about these lines running north to the range?

A. The Mesaba division which includes the several branch lines running north from the range are also omitted.

The MASTER: Then, from Duluth to Crookston and all north of that practically is omitted?

WITNESS: Yes, sir.

The MASTER: And is anything else omitted?

Q. Take the line from Sauk Center to Cass Lake, is that included?

A. It is included in the fourth item on sheet 2.

Q. You think you have stated all that was omitted from Duluth to Crookston and north?

A. Why, the eastern terminals are all excluded.

Q. That is, St. Paul and Minneapolis, and Minnesota Transfer?

A. Yes, sir; and exclusive of the eastern terminals.

Q. Duluth exc[illegible] l?

A. Yes, sir.

Q. Well, now, take the first heading, "St. Paul to St. Cloud via main line and Osseo line exclusive of all terminals and St. Cloud," St. Cloud is excluded there?

A. Yes, sir; St. Cloud is excluded.

Q. Now is St. Cloud included anywhere else?

A. No, sir; St. Cloud, Breckenridge, Barnesville, Willmar, Cass Lake, Moorhead and Redland are not included, in the statement.

Q. Is Crookston included?

A. No, Crookston is on the line north of Redland on the St.

Vincent line; it is not in.

Q. Are there any other stations that are not included?

A. Why, I think we have that right now, Mr. O'Brien.

Q. Then the terminals, St. Paul, Minneapolis, Minnesota Transfer, Hamline Transfer and Duluth and the outside stations which you have just mentioned are not included in this Ex. 34 in addition to the territory in the northern part of the state which you have already described as being excluded?

A. They are not included.

Q. Now does statement Ex. 34 include every kind of business transacted at the stations named?

A. Yes, sir.

Q. State and interstate?

A. Yes, sir

Q. Freight and passenger?

A. Yes, sir.

Q. It is for each of these years, and on the first sheet we find the total for each year?

A. On the recapitulation.

Q. Now, we ought to be able to tell from this about what proportion of your business is included in the state of Minnesota; I find on the line marked 1908 that the total freight revenue is $3,708,740.94; is that right?

A. Yes, sir.

Q. What was your total freight revenue in Minnesota, both state and interstate business, for the year 1908? you have got it in one of these exhibits, I think. That is, the gross earnings on freight.

A. $15,658,661.07.

Mr. BUTLER: What exhibit are you looking at Mr. Parker?

WITNESS: Ex. 30.

Q. So this statement contains about one-fifth of the freight revenue and is compared to one particular class of expenses?

A. The statement shows the total business forwarded from

and received at those stations, and as compared with station—

Q. That particular class of expenses?

A. Station wages and supplies.

Q. For the purpose of showing the actual profit or loss derived by operation, you have to take in every element, haven't you?

A. Well, I am not a disbursement man, Mr. O'Brien.

Q. Well, do you assume any responsibility at all with regard to this statement Ex. 34 as being of any assistance to the Master?

A. Well, as I stated before this statement for the different periods compares the same territories of the road.

Q. Yes, but if during that time while the station expenses that you have listed here have increased, economies have been introduced because of reduction of grades and because of larger box cars and because of engines which are capable of hauling much longer trains, you would have to consider those economies as well as those expenses before you could arrive at any sound conclusion, wouldn't you?

A. Well, you are getting out of my line now, Mr. O'Brien.

Q. Now, Mr. Parker, I don't take an exception to that, but you are the witness who is presenting these exhibits, and I simply want to know whether these exhibits meet with your approval, or whether you can sustain them or what you claim for them; you are the person who is presenting them to us and you are the one we have to ask about them.

A. Of course, Mr. O'Brien, any testimony that I might give you as regards expenses would be of no value, I have absolutely nothing to do with it.

Q. Then this is another case where you have set down arbitrarily a series of figures as you were directed to do?

A. Not arbitrarily; I set them down actually as they are.

Q. You have set down a series of figures as you were arbitrarily told to do?

A. As I was told to do; yes, sir.

Q. You were not arbitrary, but the person who gave you the instructions was.

A. Well, I wouldn't want to say that.

Q. And what relative value they have or how far they establish the actual facts in connection with the increase or decrease of the cost of the entire business, you don't know?

A. Well, excepting as it would be apparent to anybody that the earnings have gradually decreased and the expenses have increased.

Q. As to that particular class of service, isn't it?

A. Yes, sir.

Q. But, as I say, whether this establishes or leads to any correct conclusion as to whether or not expenses generally have increased or decreased you don't know?

A. Well, I know as a matter of fact, just as a matter of hearsay we all know that expenses have increased; I can't testify to that in detail; I am not competent to testify in regard to expenses in detail.

Q. Then you are not competent to testify from knowledge, and I am only asking you from your knowledge; you don't know of your own knowledge?

A. Not from any records in my possession.

Q. Whether expenses have proportionately increased or not?

A. No, sir; I don't know that.

Q. Now, is this Ex. 34 compiled from any record kept by you in your department?

A. The figures regarding freight traffic are compiled in my office; the figures regarding passenger traffic are compiled by the Auditor of Passenger Receipts and added on in my office after being compiled. The figures regarding expenses are compiled by the Auditor of Disbursements and are added on in my office.

Q. So that this statement is not a compilation from any record maintained in your department?

A. Yes, sir; the record is in my department. This is done every year, at the end of every year I make such a statement for all stations.

Q. And you keep that record?

A. Yes, sir.

Q. Preserve the record?

A. Yes, sir.

Q. So that that record in your department is open to our inspection?

A. Yes, sir.

The MASTER: These particular divisions?

WITNESS: Yes, sir.

The MASTER: Kept by themselves?

WITNESS: No, sir; they are not added together, your Honor, in this shape. This is a compilation from the annual statements.

Q. Well what I understand the Master asks you is whether the record was kept in this form and with reference to these stations only, or do you keep it as to all stations?

A. Not in this form. We have it by stations, for all stations.

Mr. BUTLER: I stated when that was introduced that it was kept separately as to each station.

The MASTER: But for the whole road in the state you have it?

WITNESS: Yes, sir.

Q. You have it for the whole road in the state?

A. Yes, sir.

Q. And why you were instructed to bring up this statement for only these stations you don't know?

A. Excepting as I previously explained, that mines are continually being opened in the northern part of the state, and the

eastern terminals figures would have very little bearing on Minnesota; they would include business passing clear over the road.

Q. Well, there are no mines being opened at Crookston or up along the Red River Valley?

A. No.

Q. Nor in St. Cloud?

A. No, but St. Cloud would receive a great deal of wheat for milling from points far into Dakota. As I understand the purpose of this statement I was to endeavor to show local conditions in Minnesota as far as possible.

Q. Well, do you think it does show local conditions in Minnesota?

A. I do.

Q. That it shows the entire local conditions in Minnesota?

A. Well, I couldn't say that it showed the entire local conditions; it shows the conditions by large territories which should be indicative of the others.

Q. Do you think a statement which only includes a fifth of the total tonnage hauled in Minnesota, which only refers to a part of the stations in Minnesota, and which only shows an increase in one class of expenses at those selected stations, when the truth is that in another class of expenses great economies have been introduced, demonstrates any fact or shows any fair conclusion?

A. Why, I think this statement shows a fair conclusion between the station earnings and station expenses. Now I presume other expenses will be brought in by some other witness.

Q. What you mean is, that so far as this goes you believe it to be a truthful statement?

A. Yes, sir.

Q. So far as your work is concerned in it it is a truthful statement?

A. To the best of my knowledge and belief.

Q. Now, of course, Mr. Parker you, as a gentleman who is

competent to be at the head of a large department of this road are gifted at least with some mathematical ability; now, if you desired to ascertain the ultimate fact that we are discussing here, the sufficiency of these rates, and if in that investigation the increase or decrease in the cost of service was one of the important elements, would this statement in and of itself, unless supplemented by other information prove anything?

A. It would merely prove the part that it shows, that certain part of the expenses compared with the revenue.

Q. Well, I hope you are going to bring in the supplementary ones. Now, Mr. Parker, let us imagine a shipment from St. Paul to Greenbush; that is in the northern part of the state; that would not be included in this table at all?

A. No, sir.

Q. Let us imagine a transaction between St. Paul and Litchfield on which the freight was prepaid at St. Paul; would such a shipment as that be included?

A. Yes, sir.

Q. Under the heading of "received at Litchfield?"

A. Under the heading "Minneapolis to Breckenridge."

Q. Yes, exclusive of these two stations.

Mr. BUTLER: Well, that is after the compilation, but when you are dealing with Litchfield—

WITNESS: In the original statement, Mr. Butler, it would show up on the "received at Litchfield."

Q. Well, that is what I want to get at. I want to get at whether such a transaction as that would be shown.

A. Yes, that would be shown on "Litchfield received."

Q. Litchfield is included?

A. Yes, sir.

The MASTER: Even though the freight should be prepaid?

WITNESS: Yes, sir; that would make no difference.

Q. Now, in passengers, where cash fares are paid upon the train, I suppose that would not be included?

A. Yes, sir.

Q. A passenger leaving Litchfield and paying his fare upon the train coming to St. Paul, would that be included?

A. That would.

Q. How would you get that—from the conductor's report?

A. Well, now, Mr. O'Brien, I can tell you this: I was formerly auditor of passenger receipts, but probably Mr. Tilton can tell you better. I know that it is in there and always was put in.

Q. Well, probably you had better give your idea of that while we are examining you so that it will be here all together under this subject. There is no objection to your giving your understanding of that as you understand it.

A. Mr. Tilton is right here, and if I am wrong he can correct me. The cash fares from conductors' reports are tabulated between all stations. This cash fare would show up as one passenger forwarded from Litchfield with revenue to correspond.

By Attorney General YOUNG:

Q. I think you stated, Mr. Parker, that Ex. 29 was prepared by direction of counsel in this case?

A. Yes, sir.

Q. And it purports to show the loss that would result to the revenue of the entire system if the alleged percentage of reduction in rates on both the classes and commodities prescribed by the merchandise order of the Railway Comission and by the Commodity Rate Law of April 18, 1907, were applied all over the line?

A. It shows the losses which would result on all of our business except strictly intrastate in Minnesota by the application of the various rate orders under discussion. In order to obtain the loss on the entire line, it would be necessary to add the loss on the intrastate business in Minnesota per my exhibits 21 and 22.

Q. Now, in getting at the percentage which you applied to

the entire volume of freight business carried on by your road outside of intrastate business of Minnesota, you have taken a per cent derived from combining both the commodity rate law passed by the legislature and the order made by the Commission in November, 1906?

A. Yes, sir; I have arrived at the per cent on the total loss on intrastate business in Minnesota on the basis of all the orders combined.

Q. Well, now, you know that so far as freight business is concerned we have involved in this litigation two reductions; one consisting of the reduction which results from the so-called merchandise order made by the Railway Commission on November 15, 1906, and the other one a reduction which would have resulted from the commodity rate law of April 18, 1907, had that law gone into effect, and that those two reductions in this proceeding constitute different causes of action; in other words, they are not all jumbled together as one cause of action, but they are two specific reductions and are complained about separately in this proceeding. You understand that, don't you?

A. Why, I did not understand it.

Q. You do know, do you not, that it would be possible in this proceeding to hold one of those reductions invalid and the other one valid?

A. I did not know that.

Q. You didn't know that? Didn't counsel tell you that?

A. No, sir.

Q. You proceeded on the theory that if either one of these schedules of rates was to be found unreasonable, that the other would be found unreasonable also, and that they must stand or fall together?

A. Well, the question of the final outcome never entered my head, General.

Q. Well, what I am getting at is the probative force of your table. Now, we want to get at the question, we would like to

know it for our own information, and no doubt the Master would like to know it for his information, what you claim would be the loss to the Company by applying to the total business of your road the percentage of loss which would result from the merchandise rate order and what would be the loss to the revenues of the Company by the application to your total business of the reduction embodied in the so-called commodity rate law; you haven't any such computation, have you?

A. We have none, and really have no means of getting at it without an enormous amount of work.

Q. Would it be impossible to apply the percentage of reduction in your merchandise rates which resulted from the Railway Commission's order of November 15, 1906, to the total volume of your merchandise business on the system?

A. To do that would necessitate going through all of our way-bills for the two years in question, all over the line, and classifying them, similar to the manner in which we classified the way-bills for two months in connection with these statements; it would cost thousands of dollars.

Q. Well, I am not asking you to do it, you understand, but I am asking you why you didn't do it if you expected to use this method of reasoning by percentages; and I want to ask you further whether it would not be possible to apply the alleged percentage of loss to your Company on its intrastate business in Minnesota which would result from the application of the rates prescribed by the act of April 18, 1907, to all business of that class done by your system.

A. Well, that would be quite a job but of course, it wouldn't involve any such an amount of work as the merchandise. We have not made such compilation, however.

Q. Well, neither one of those would amount to anything as a matter of information in my opinion, but they would at least have the specific character of applying each to the specific cause of action involved in this case to which it is related. Now, in

that connection, you know, do you not, that the railway companies accepted the merchandise reduction of November 15, 1906, put in the rates and were observing them peaceably and without complaint up to about the 1st of May, 1907, and probably or at least might have been observing them without complaint up to this day if it hadn't been for the fact that the legislature in 1907 made additional reductions, one of them being the passenger reduction, and the other one this commodity rate law of April 18, 1907?

A. I know the merchandise rates were adopted November 15, 1906; however, I heard a great deal of complaint about it myself, but not in a legal way, I presume—not a legal complaint.

Q. You do know, do you not, also, that the percentage of reduction in the merchandise earnings of the Company on its intrastate business in Minnesota affected by the so-called merchandise order of November 15th was very much greater than the percentage of reduction that would have resulted in the commodity business of the Company from the application of the rates prescribed by the act of April 18, 1907?

A. I haven't the figures; however, I understand the reduction on merchandise was greater.

Q. It was very much greater, wasn't it?

A. Well, I am not prepared to say that, General.

Q. The schedule of merchandis rates which the companies had put in and were observing—and are observing yet, because they are not enjoined in this suit—effected a percentage of reduction of about how much, do you know?

A. Well, it is approximately twenty per cent, locally in Minnesota.

Q. On the intrastate business in Minnesota?

A. Yes.

Q. And I think one of your tables shows that the intrastate business in Minnesota is about three per cent of the business

of the system, it is not?

Mr. BUTLER: That is ton miles, General.

WITNESS: That is ton miles, I believe, of three plus.

Mr. BUTLER: It was on the basis of ton miles, I think, General.

Q. Do you know what percentage it would be of the business of the system?

A. Well, what do you refer to? the revenue or the ton miles?

Q. Well, you have given it in ton miles; I am speaking about the revenue now.

A. It would be between five and six per cent.

Mr. BUTLER: That is strictly local?

WITNESS: That is Minnesota intrastate to the total earnings of the road.

Mr. O'BRIEN: That is freight earnings?

WITNESS: That is freight earnings.

Q. The percentage of freight earnings on Minnesota intrastate business to the total freight earnings of the system which you have just given, includes both the things that are carried in the classes and commodities?

A. Yes, sir; all business.

Q. Could you state in a general way about what proportion of that percentage (which is somewhere between five and six per cent in total) applies to what is known as the classified merchandise business?

A. Well, I wouldn't care to hazard a guess at that.

Q. What proportion of the freight earnings on strictly intrastate Minnesota business is earned on merchandise?

A. Well, approximately thirty per cent.

Mr. O'BRIEN: Which would be something less than two per cent on the entire freight business of the road?

WITNESS: Yes, sir.

Q. And it is on this latter portion of the company's earn-

ings that the merchandise order of the Commission operated to effect a reduction of twenty per cent?

A. The reduction of twenty per cent is on the intrastate merchandise in Minnesota.

Q. Now, then, do you know what the proportion or percentage of reduction on the commodity business of the company would have been affected by the commodity rates prescribed by the act of April 18, 1907, had they gone into effect?

A. Why, I couldn't say off-hand, General. It could be compiled in Minnesota (the percentages) from the statements you have here.

Q. It would not exceed five or six per cent, would it, on the Great Northern road?

A. These figures would indicate it would be in the neighborhood of six per cent.

Q. So that if the Master or the Court were endeavoring to figure out how much loss the Great Northern railway sustained or would sustain by reason of the provisions of the law of April 18, 1907, if the rates or percentage of reduction embodied in that law were applied to its total business, this Ex. 29 of yours would not furnish the Court any information, would it?

A. Ex. 29 merely shows the information on the basis of the percentage of reduction on all of the commodities and merchandise in Minnesota.

Q. Combined?

A. Combined.

Q. And the possible reduction effected by the order and the possible reduction effected by the commodity rates consolidated and not given separately?

A. No, sir; my opinion is, however, that it would not alter the figures materially.

Q. Well, that isn't the rate of reduction either on commodities or on merchandise, is it?

A. No, the 14.80 per cent isn't, but it is the average reduc-

tion on the whole applied to the average of all the rest of the line.

Q. But it isn't the average on either?

A. No, it isn't the average on either; it is too high for commodities and too low for merchandise.

Q. So that treating these reductions as separate causes of action, it has no bearing on either one?

A. Well, I am not competent to say as to that.

Q. Well, there is no means whereby the Court could figure out from that exhibit what the percentage of reduction would be either upon the commodities or upon the merchandise, taken separately?

A. No, it couldn't be figured from this statement.

Q. So far as any information afforded by that table is concerned, the commodity rates and the merchandise rates would have to stand or fall together?

A. I can't say as to that, the legal status of it.

Q. In other words, that doesn't disclose anything in the nature of a fact in this case or a possibility even, because it is not the average of either one of these rates taken alone?

A. Well, I wouldn't admit that it doesn't show that. The percentage may be considered as made upon an arbitrary basis, but it certainly shows the average percentage of reduction applied to the balance of the line on two different bases; one on the commodities and merchandise affected, the other on applying the commodities and merchandise affected to all of the intrastate business in Minnesota.

Q. Yes, you are not to blame, Mr. Parker, for this being in the shape that it is, because you say you were told to make it that way, but when you are informed in connection with it that there is no such rate before the Court as a combined rate upon commodities and merchandise, doesn't it occur to you then that the table has no application?

A. No, sir; in the first place, I was not told to make it in

this shape. I was told—

Q. Well, did you make it that way of your own volition?

A. I was told to figure the reduction on the balance of the line on a percentage basis on the same basis that these reductions affected Minnesota. Now, it would have been an enormous job to have analyzed all the way-bills on the system to prepare the information separately; for that reason it was prepared in this manner.

Q. Couldn't you have applied your six per cent reduction which you say would have been a fair basis when figuring on commodities, instead of applying the fourteen per cent?

A. I might have applied the six per cent that you speak of, but it would be very difficult to get at the class rates all over the line.

Q. You haven't undertaken to do that?

A. No.

Q. You have applied it to the whole income of the company?

A. If I had applied the six per cent to the commodities what would I have had to apply to the balance of the earnings?

Q. Why didn't you apply the six per cent to all of the earnings in order to show what the consequence would be to your earnings if the percentage of reduction accomplished by the commodity rates were applied to all of your business?

A. Well, General, I wouldn't see any reason in applying six per cent any more than I would to apply twenty on the merchandise.

Q. You are fighting these commodity rates; those are the only rates that are enjoined in this case; don't you know that?

A. Well, I understand they are the only rates enjoined, but I didn't understand they were the only rates we were fighting.

Q. Well, we are at least fighting rates separately. It wouldn't be any ground, for instance, in your opinion, Mr. Parker, for holding the merchandise rates void to find upon

sufficient proof that the commodity rates were unreasonable, would it? The commodity rates might be unreasonable, in other words, and the merchandise rates be perfectly reasonable, might they not?

A. Possibly so.

Q. Yes. So that in order to have any sort of accurate information upon which we could do any reasoning, we must keep those rates separate; and it would also be true that the commodity rates might be reasonable and the merchandise rates unreasonable as applied to that particular branch of the business?

A. Yes, sir.

Q. But the unreasonableness of one would be no proof of the unreasonableness of the other?

A. Not necessarily.

Q. Therefore they should not be bunched in this way, should they?

A. Well, as I explained before, I worked up the best information I could with the material I had at hand. I really don't know how the statement is going to be applied to the rate case. It shows certain information, and it shows exactly how it is arrived at here.

Q. Now, you also know, do you not, Mr. Parker, and while you haven't testified to this in your direct examination, you bring these tables in here and you give them the standing that they would naturally acquire from your individual character because they are your tables and will be so designated throughout the case; you do know that the merchandise order made by the Commission did not make or purport to make any level percentage of reduction in the merchandise rates in this state, but that on the contrary it fixed a system of equal merchandise rates for equal distances throughout the state?

A. Yes, I know that generally.

Q. So that in cases where the existing rates were less than

the rates that would result from applying the principle of equality of rates for equal distances, they could be raised, and where they were above that they would have to be lowered?

Mr. BUTLER: Well, they could not be raised without the action of the Commission.

A. Well, I am not willing to admit that they could be raised, General.

Attorney General YOUNG: They could be raised necessarily, on application to the Railway Commission.

Mr. BUTLER: Yes, the Commission could raise them or permit them to be raised; they can, any of them.

Q. You knew, did you not, that some of the officers who have testified in this case on rates have testified that as to the existing rates no system was followed?

A. No.

Q. —that the rates were in all cases arbitrary?

A. I haven't read such testimony, General.

Q. Did you read the testimony of any of the witnesses who said that there could not be any system of rate making?

A. No, sir.

Q. Do you know whether there is any better system or any more harmonious method governing the existing rates in adjacent states than the system or method under which existing rates have been made in this state?

A. No, sir; I haven't followed up that feature of the case at all.

Q. You don't know but what the rates over the entire system may have been and it may be are now as arbitrary and as unrelated to each other as are some of the rates in this state?

A. I don't know that any of the rates in this state are arbitrarily related to each other. That testimony would have to be given by a traffic man.

Q. Well, as I say, I only ask you this because you come in here and undertake to testify on this matter of rates.

Mr. BUTLER: No, he didn't testify on the matter of rates at all.

Attorney General YOUNG: Well, I don't know, I think that these exhibits will be referred to hereafter as Mr. Parker's Ex. 27 and 29 and so on; it will be claimed for them that they prove certain things. Now, if Mr. Parker doesn't know anything about the question, if he simply prepared these as mere mathematical calculations from data furnished by somebody else and under the direction of somebody else, and they really are matter which ought to have been presented as evidence by somebody else, why we want to know it.

WITNESS: Why, these statements were all prepared as I have stated a number of times, under my personal supervision; necessarily the rates are furnished by the traffic department.

Q. But in making this table, for instance, you didn't start out to put down a tabulation of facts that in your mind justified any deduction of any kind by the Master in relation to these rates, did you?

A. I did; I had that idea in mind.

Q. What was it you were trying to prove by that table there before you?

A. I was treating the various reductions as a whole, forming a percent and figuring what we would lose if the same horizontal reduction was made all over the balance of the line and on the interstate in Minnesota.

Q. Didn't you know that there was no such horizontal reduction made in this state under either the order or under the law?

A. I was merely figuring the average, General.

Q. You told me a moment ago that you didn't know at the time you made that table that these rates were challenged separately in this case.

A. I did not know that.

Q. And yet you undertook to draw deductions to guide the

Master in his conclusions in this case without knowing even that much about it, did you?

A. I figured on the average reductions.

Q. Now, you did it because somebody told you to do it, didn't you?

A. No, sir.

Q. Well, if you were going to draw original deductions in this case for the guidance of the Master, don't you think it would be necessary to find out what the case was about first and the form in which it was presented?

A. Well, the counsel never told me that part of the case, General,—about how the decision in connection with the commodities might be different than the decision in connection with the merchandise.

Q. Well, if you had known that, you would have prepared the table differently, wouldn't you?

A. No, sir; I wouldn't have done so.

Q. Would you have thought, if you had known that they were separate and that the decision that would apply to one might not apply to the other,—would you have thought that that would be any assistance to the Master, drawn as it is, that Ex. 29?

A. Well, I still figure that this is the average reduction. I don't know, as I stated before, just what value this statement is; it merely must stand on its own feet; it shows just what it purports to show.

Q. Suppose the merchandise rates were upheld and the Court had proceeded a step further and was determining whether or not the commodity rates ought to be upheld, is there any information there that would help him?

A. Well, I should judge that the other statements would be used more for that. This is merely a statement to show what might happen if certain other things happened.

Q. Yes, and what might happen if certain other things

didn't happen. Now, you know, do you not, Mr. Parker, that when it comes to the matter of reducing rates that there is not such a perfect harmony between intrastate rates and interstate rates either in Minnesota or in any other state through which your road passes, that if one were reduced slightly the other one would have to be reduced also?

A. I don't consider myself competent to testify as to the general basis of rate making.

Q. Well, we come right back to the proposition here where you are asking the Court to take your computations and what would happen to the whole system. Now, as a matter of fact, you know that rates are not reduced in that way, don't you, on the whole system at once?

A. Why, no, the rates,—I never heard of rates on all commodities being reduced at once. This statement was merely to show the effect which would be produced by the same percentage of reduction.

Q. Well, now, at the time that the railroad company with which you are connected put in what is called in this case the voluntary reduction in the fall of 1906, they didn't put that in all over the system, did they? They put it in locally?

A. No, the voluntary reduction on grain and coal extended pretty well into North Dakota and into South Dakota.

Q. It extended into a part of North Dakota and a part of South Dakota and into a part of Minnesota?

A. Well, I understood that practically covered the whole state of Minnesota.

Q. Well, it covers your line in the state?

A. Yes.

Q. But it didn't apply to the whole of the Great Northern system?

A. No, that is the only territory that it covered.

Q. And it didn't unsettle your rates in any other state, did it?

A. Well, I can't say as to that; it did not to my knowledge.

Q. And as a matter of fact and as a matter of actual experience, railroad rates are to a large extent local, whether they apply to interstate business or to intrastate business, and when reductions or alterations or revisions are made they are usually made within a small territory?

A. I couldn't testify as to that, General. You would have to have one of our traffic men to handle the rate situation.

Q. To illustrate: your road runs from St. Paul to Seattle and up into Canada; you haven't got a schedule of rates running from St. Paul on a mileage basis to all the stations between St. Paul and Seattle?

A. No.

Q. Rates are not made that way?

A. No, not that distance.

Q. They necessarily radiate around market centers and are local in their character. There are through rates, of course, from St. Paul to Seattle—

A. Yes, sir.

Q. —on certain commodities and merchandise. But the fact that rates are not made on a mileage basis is illustrated by the fact that the same rate on merchandise exists from Chicago to Seattle as from St. Paul to Seattle?

A. Well, of course, different conditions would govern in different parts of the country as respects that.

Q. You know that is true, don't you?

A. Yes.

Q. So that the mere fact that rates are reduced in one locality is no reason, so far as you know, is it, why rates should be reduced on the whole system, inasmuch as rates are not fixed on a mileage basis to start with?

A. Well, possibly not, on the theory of rate making, but as one state reduces, the other states seem to keep on following suit.

Q. But the question to be determined in each case is not so much what any other state has done, as to whether or not the railroad within the jurisdiction of the rate-making power is getting an adequate income on its investment, isn't it?

A. I presume so.

RE-DIRECT EXAMINATION.

By Mr. BUTLER:

Q. In your cross-examination reference was made to Ex. 18, the first exhibit introduced, and to the rates per ton per mile indicated upon that exhibit, and on cross-examination the fact was elicited that the Minnesota intrastate revenue for 1908 yielded a rate per ton per mile of 13.8 mills on an average haul of 113.3 miles, as I caught your testimony. Now, referring to Ex. 33, the second subdivision of that exhibit under the subcaption "Minnesota proportion of interstate including local interstate business" includes, as I understand it, all interstate business moving in part in Minnesota?

A. Yes, sir.

Q. And the last column shows the average length of haul of such interstate business?

A. The average length of haul in all states, the last column.

Q. The next to the last column shows the average length of haul while in Minnesota?

A. Yes, sir.

Q. And the average length of haul on the whole is 411.8 miles.

A. Yes, sir.

Q. As compared with 113.3 miles, the average length of haul of the Minnesota intrastate business on which was figured the rate per ton per mile in cross-examination at 13.8 cents?

A. Yes, sir.

Q. Now, referring again to this Ex. 33, I observe that commodities other than iron ore have an average haul in all states of 557.6 miles?

A. Yes, sir.

Q. And that the other divisions other than the Mesaba Division has an average length of haul in all states of 621 miles?

A. Yes, sir.

Q. And taking the Mesaba Division and the other divisions together gives the average on the interstate business in all states 411.8 miles as you have stated?

A. Yes, sir.

Q. Now, in dividing revenue of interstate business hauled on your line in Minnesota in part and in another state or other states in part, the basis of division of revenue is on the mileage pro-rate?

A. Yes.

Q. As for instance, each particular movement is treated separately, and if on a single movement it was hauled one hundred miles in Minnesota and one hundred miles in another state or other states, in separating the revenue as between states, one-half would be given to Minnesota?

A. Yes, sir.

Q. So, in determining the state revenue on interstate business moving on your line in Minnesota and elsewhere, the division is in all cases on the basis of each shipment on a mileage pro-rate?

A. Yes, sir.

Q. And on what is called the local interstate business (that is, business that is interstate in fact but local to the Great Northern line in Minnesota) there is allowed to Minnesota all that the Great Northern gets out of the haul?

A. Yes, sir.

Q. With respect to the figures in the exhibits introduced by

you with respect to merchandise earnings, I want again to refer to the manner in which they were prepared. I understood from your direct examination that the merchandise earnings were treated under four heads: First, that which is intrastate; second, that which is local interstate, as you have defined it, and the balance of the interstate was divided into two heads, one called the regular interstate except lake terminal business between points in Minnesota; and the fourth was that which was excepted in the third, the lake terminal business in Minnesota?

A. Yes, sir; that is correct.

Q. Now, I understand that you revised all of the way-bills with respect to those four classes of merchandise business for the months of July, 1907, and April, 1908?

A. We did.

Q. Both months in the fiscal year ending June 30 1908?

A. Yes, sir.

Q. Now, what do you mean by "revising the way-bills" so that the record may disclose definitely what that is?

A. After assorting them in order, to and from the various stations, we then drew off the tonnage by classes, after which the old merchandise rate was applied to arrive at the earnings before the reduction, and the new merchandise rate, made effective November 15, 1906, was applied to ascertain the earnings after the reduction—applied to the same tonnage, both of the rates.

Q. In the year 1908, the fiscal year ending June 30, 1908, the rates were as at present on merchandise?

A. Yes, sir.

Q. All of the changes that were made by reason of the acts and orders of the Commission became effective before the 1st of July, 1907?

A. Yes, sir.

Q. So that the merchandise business moved under the rates

in controversy in this suit in the fiscal year 1908?

A. Yes, sir.

Q. Now, as to the effect of your computations: With respect, first, to Minnesota intrastate business, take for example a shipment of merchandise under the class rates from Minneapolis to St. Cloud; you first had what you received for the shipment?

A. Yes, sir.

Q. And then with respect to that shipment you ascertained what you would have received had the rates remained as they were before the orders of the Commission?

A. Exactly.

Q. And the difference between the two indicates the loss or reduction on account of the change in the rates?

A. Yes, sir.

Q. Now, with respect to Minnesota intrastate business, was that thing done with respect to every shipment of merchandise moving in July, 1907, and April, 1908, which was wholly intrastate?

A. Yes, sir; every shipment, carload or less than carload, that was subject to these rates.

Q. That is, where the rates effected any change?

A. Yes, sir.

Q. Now, the next class of business that you have referred to in this merchandise matter is what you call local interstate business. Was there, as respects that business, or some of it, at any rate, changes in rates about the same time that the Commission's order became effective?

A. They were made exactly the same date in a great portion of them.

Q. The changes became effective on a great portion of that on the same date that the Commission's order took effect?

A. Yes, sir.

Q. Now, did you revise the way-bills of that business in the

same manner that you did of the strictly intrastate business?

A. Yes, sir.

Q. For the same period of time?

A. Yes, sir.

Q. Now, with respect to the other interstate business: there are two classes remaining, that which touches the head of the lakes to points in Minnesota, and that which does not, as I understand it; and were the rates on such stuff changed at or about the same time that the intrastate rates were changed?

A. At the same time.

Q. And did you revise all of the way-bills of that business for the same period in the same manner that you did the intrastate business?

A. Exactly the same.

An adjournment was here taken until Wednesday morning, April 7, 1909, at 10 o'clock.

Federal Building, Wednesday, April 7, 1909.

The hearing was resumed pursuant to adjournment.

FREDERICK H. PARKER,

recalled on behalf of Complainants, testified:

RE-DIRECT EXAMINATION (Resumed).

By Mr. BUTLER:

Q. Complainant's Ex. 35-Parker, this is the statement, Mr. Parker to which reference was made about the time we adjourned last night.

A. Yes, sir.

Q. The statement is under caption following "Great Northern Railway Line, Statement showing freight revenue on merchandise shipments for the year ending June 30. 1908, from an actual compilation of the earnings during July, 1907, and April, 1908, on shipments affected by the order of the Railway

Commission. First: On the basis of multiplying the actual figures compiled for July, 1907, and April, 1908, by six on the theory that these are representative months. Second: Applying thereto the relative percentage which the merchandise shipments to and from Eastern Terminals for these months bear to similar shipments to and from Eastern Terminals for the year ending June 30, 1908." Now, Mr. Parker, by way of explanation I want to ask some questions to see if we understand this alike. During the period covered by these figures the present merchandise rates were in?

A. Yes, sir.

Q. And the revision of the way-bills on the four classes indicated on the exhibit was made by applying to the actual business which was done in the two months in question the rates which existed before the orders were made?

A. Yes, sir.

Q. And multiplying the revenue by six to get at the yearly revenue, in the first instance?

A. Yes, sir.

Q. So the first line reading as follows: "Intrastate in Minnesota, basis July, 1907, and April, 1908, multiplied by six," indicates that at the old rates the earnings would have been $983,224.02, and that as a matter of fact such earnings were under the reduced rates $785,728.14, or one-sixth of that for the two months?

A. Yes, sir.

Q. And the amount of difference is indicated at $197,495.88?

A. Yes, sir; the loss.

Q. Now, on the percentage basis were procured the figures used in Exhibits 22, 24, 26 and 28?

A. Yes, sir; on the various items.

Q. On the four different kinds of classes of business; and on the percentage basis the intrastate in Minnesota loss was figured at $178,213.22?

A. Yes, sir.

Q. Being $19,282.66 less loss than indicated by considering these two months, one-sixth of the business?

A. Yes, sir.

Q. The percentage basis referred to in your cross-examination by Mr. O'Brien was based on the less than carload lots at the eastern terminals?

A. To and from eastern terminals.

Q. And your experience has shown, as I understood your testimony, that such business would be between 85 and 90 per cent of all of the intrastate business in the state in less than carload lots?

A. Yes, sir.

Q. And assuming that like relation existed with respect to the carload business, the percentages used were arrived at?

A. Yes, sir; assuming the same percentage would exist in the carload business affected by this order, not the carload business on all commodities.

Q. The purpose of getting at that percentage was, if possible, without a complete revision of the whole business in the years covered, to reach a more accurate basis than would have been reached by multiplying the loss on the two months of the business actually revised in your work, by six?

A. Yes, sir.

Q. Now, the other three kinds or classes of business referred to on this exhibit, to-wit: the local interstate business and the interstate business other than the Duluth and Superior business to and from points in Minnesota, was revised in exactly the same way for the two months in question?

A. Yes, sir.

Q. And the figures multiplied by six and the difference indicated?

A. Yes, sir.

Q. And these differences are compared with the losses indicated on Exs. 24, 26 and 28 respectively?

A. Yes, sir.

Q. I think in my question I did omit, though I didn't intend to, the interstate business to and from Duluth and Superior in Minnesota; that was handled in exactly the same way?

A. Yes, sir.

Q. And in each instance as respects each one of these four kinds or classes of business, the basis of treating July and April as one-sixth of the year's business, indicates an increased loss?

A. Yes, sir.

Q. The aggregate loss for the two months in question on the four kinds or classes of business indicated on the exhibit amounted to $73,584.53?

A. Yes, sir.

Q. And six times that produces a loss on the four kinds or classes of business of $441,507.18?

A. Yes, sir.

Q. That is on the basis of the assumption that these two months equalled one-sixth of the year?

A. Yes, sir.

Q. On the basis shown in your Exs. 22, 24, 26 and 28 and on the percentage basis, will you indicate what the aggregate loss on these four kinds or classes of business amounts to?

A. $403,327.56.

Q. For the year?

A. Yes, sir.

Q. Now, this Ex. 35 indicates in the last column to the right the per cent of loss as against the intrastate in Minnesota 20.08 per cent is indicated; is that the actual amount of reduction of revenue in the two months which you revised applying the different scale of rates?

A. Yes, sir; that is the actual reduction on the business affected.

Q. Now, for the local interstate business is indicated a loss of 19.38 per cent; that is the actual percentage determined by

the revision which you have described for those two months?

A. Yes, sir.

Q. And as to the interstate business other than local interstate and the Duluth and Superior business to and from points in Minnesota, was reduced by the change in rates 8.28 per cent?

A. Yes, sir.

Q. And the Duluth and Superior business to and from points in Minnesota was reduced 21.91 per cent?

A. Yes, sir.

Q. These percentages indicate the average reduction on the whole business referred to in the exhibits, that is, the average of each class on the whole business?

A. Yes, sir.

Q. Some particular shipments being reduced more and some particular shipments being reduced less?

A. Yes, sir.

Q. And probably no particular shipment being reduced the particular per cent indicated in the column?

A. Probably not.

Q. If so, it would be a mere coincidence?

A. Yes, sir.

Q. The percentage was arrived at by taking the total earnings as they were, subtracting these from what they would have been under the old schedule, and figuring the percentage relation of the gross amounts?

A. Yes, sir.

Q. Some reference was made in your cross-examination to rate per ton per mile and especially to the rate on ore. One of the exhibits in evidence here, Ex. 32, I think, or Ex. 33. I think Ex. 33 relates to 1908. indicates that iron ore was hauled on the average 111.7 miles; Ex. 32 indicates the haul to be exactly the same; the rate, as I understand, including dockage services, is 80 cents per gross ton of 2240 pounds?

A. Yes, sir.

Q. Do you know how that is divided between the carrier and the dock company?

A. Yes, sir.

Q. How?

A. The Great Northern Railway receives 55 cents per gross ton, the dock company 25 cents per gross ton.

Q. What is the rate per ton per mile, 111.7 miles at 55 cents?

A. 4.4 mills.

Q. For two thousand pounds or 2240 pounds?

A. A short ton of 2,000 pounds. All our ton miles are based on short tons.

Q. That is, all the rest of the tonnage of the company, when revenue is computed in tons is on the basis of the short ton of 2,000 pounds?

A. Yes, sir.

Q. The ore is the one exception, so far as you know?

A. I don't think I understood your question, Mr. Butler. I understood you meant to refer to our statistics; when it is placed in statistics all commodities are on the basis of a short ton.

Q. Well, as a matter of fact rates are computed on the basis of short tons as respects everything but ore, was my question.

A. They usually are, although there may be some exceptions. My recollection is that the rates on pig iron are sometimes quoted in long tons.

RE-CROSS-EXAMINATION.

By Mr. O'BRIEN:

Q. Mr. Parker, I understand that for the purpose of arriving at the loss in revenue which would result from these rates you took all of the freight business transacted during the months of July, 1907, and April, 1908, in the state of Minnesota, which was intrastate and in less than carload lots and

applied the two sets of rates to that business?

A. We took all of the business for the months of July, 1907, and April, 1908, carload and less carload, which was affected by the Commission's merchandise order, and actually compiled the earnings on that business at the old and new rates.

Q. Well, I thought you said yesterday that you only included the business that was less than carloads.

A. What I stated yesterday or what I intended to state was that after we arrived at the actual loss for July, 1907, and April, 1908, as described in my previous answer, we then figured the loss for the year by ascertaining what percentage the less carload shipments to and from the various terminals as outlined to the same territory for the months of July, 1907, and April, 1908, bore to exactly the same class of business for the year; the carloads were omitted merely in arriving at these percents, but not in arriving at the actual loss for the two months in question.

Q. The actual loss for the two months in question appears no where in your exhibits?

Mr. BUTLER: It does on Ex. 35 now, Mr. O'Brien.

Mr. O'BRIEN: I think not.

WITNESS: The actual loss could be ascertained by taking the figures on Ex. 35 opposite the heading "Basis July, 1907, and April, 1908, multiplied by six," and dividing such totals by six.

Q. That is, the actual loss that you found was one-sixth of $197,495.85?

A. Yes, sir; on intra-state business in Minnesota.

Q. Or—

A. $32,915.98.

Q. You ascertained by applying the two sets of rates to the actual intra-state transactions during the months of July and April, that the application of the rates would cause a reduction on that business during those two months of $32,915.98?

A. Yes, sir.

Q. What was the total business during those two months, do you know?

A. The total of what business?

Q. The total business of the same character upon which this loss would occur.

A. You can obtain that information by dividing the other items under the same heading by six.

Q. Well, do you mean that the business of those two months was actually one-sixth of $785,728.14?

A. Yes, sir.

Q. Or that the old rates would have been one-sixth of $983,204.02?

A. Yes, sir; on the business affected by the order.

Q. One-sixth of the first item is $163,870.67?

A. Yes.

Q. The next.

A. One-sixth of the second item under the heading "At rates effective November 15, 1906," is $130,954.69.

Q. Under the second column I believe you now show that there was transacted during the months of July and April business which would return at the prescribed rates $130,954.69; is that right?

A. Yes, sir.

Q. Is that all of the intra-state business in the state of Minnesota which was affected by the prescribed rates?

A. Yes, sir.

Q. Is it all of the intra-state business transacted in the state of Minnesota during those two months?

A. No, sir; there would be a great deal of other intra-state business on commodity rates; possibly some merchandise which would not be affected by these rates. My recollection is that some of the very small shipments, the minimum were not changed materially; they would not be included in these figures; it would, however, include the bulk of what we term our merchandise business.

Q. But it does not include all of the merchandise business?

A. No, as I stated, there are some omissions where they are not affected by the rate.

Q. And it does not include a large portion of the commodity business?

A. It includes no business on which commodity rates are quoted; it would include carload shipments on which the rates are based under this order.

Q. Does this exhibit refer exclusively to merchandise?

A. Yes, sir; it refers exclusively to shipments handled under the merchandise rates, so termed.

Q. Every portion of it?

A. Yes, sir.

Q. Now, the loss during those two months of $32,915.98, is the total loss upon intra-state business, because that includes all business, the rates upon which were actually reduced by the Commission's order?

A. I don't believe that question is clear, Mr. O'Brien.

Q. The loss shown in the third column of Ex. 35 which for the months of July and April amounted to $32,915.98, was the actual total loss in revenue sustained by the Great Northern road during those months upon intrastate shipments of merchandise in Minnesota?

A. It was the loss upon intrastate shipments of merchandise and carload shipments which would be affected by the Commission's order.

Q. Well, do you mean by carload shipments commodities?

A. By carload shipments I mean shipments in carload lots which would be affected by the so-called merchandise order.

Q. Yes.

A. Not carload shipments handled under commodity rates of any kind.

Q. Well, we will have to start again: I understand that this Ex. 35 refers exclusively to freight covered by the Western

Classification and by the order of the Commission of September 6, 1906.

Mr. BUTLER: And May 3, 1907.

WITNESS: Mr. O'Brien is right, Mr. Butler. It is covered by the order which went into effect November 15, 1906. I might add that this particular statement does not include the loss on the carload groceries to jobbing centers; they were handled in carload lots, to comparatively few stations and the earnings at the old and new rates, and the loss caused by the new rates were actually compiled by examining the way-bills for 24 months, or rather for 12 months in this particular year ending June 30, 1908. This statement, Ex. 35, refers to all other shipments except the carload groceries to jobbing centers affected by the Commission's merchandise order.

Q. And is confined to classified freight?

A. Yes, sir.

Q. Now, the loss shown for the months of July and April is the total loss upon that character of merchandise sustained?

A. Yes, sir.

Q. Because you have taken into consideration in arriving at that loss every shipment of freight affected by the rates?

A. Yes, sir; every shipment handled under Class rates.

Q. And affected by the rates?

A. Yes, sir; I merely wished to make clear that the carload groceries are not in here; every shipment handled under the Class rates.

Q. But when you come to the total business in column two, it does not show the total freight business moved under Class rates because you have only included the freights which were affected by the order?

A. It does not include all of the shipments under Class rates, but I may safely say that it includes practically all of them. The omissions would be very slight, say minimum charges for example.

Q. The smaller the amount shown in column two, if the amount shown in column three remains the same, the higher would be the percentage of loss; isn't that true?

A. I don't follow your question, Mr. O'Brien.

Q. Well, if instead of $785,728.14, as shown in the first item of column two, the amount was $400,000, and the amount in column three remained $197,495.88, the percentage shown in the fourth column would be much more than 20.08?

A. The percentage shown in the fourth column would not be changed. The percentage is figured by applying the earnings at the rates effective prior to the reduction shown in column one to the loss shown in column three. I wish to add here that the figures in column one are arrived at on the basis of exactly the same tonnage and exactly the same identical shipments as the figures in column two; or, to make it more clear, if a certain shipment was not affected by the reduced rate order, the earnings of such shipment would not appear in either column.

Q. $197,495.88 is 20.08 per cent of what?

A. $197,495.88 is 20.08 per cent of $983,224.02.

Q. That sum, $197,495.88, is the total loss sustained by the Great Northern road upon intrastate shipments in Minnesota by reason of the operation of the merchandise rates during 1908—

A. Yes, sir; that is the loss on the business affected by said rate.

Q. Wait a moment,—arrived at by multiplying the total loss for July and April by six?

A. Yes, sir.

Q. But the sum of $983,224.02, shown in column 1 as the revenue which would be derived by the Great Northern road during the same period if the rates had not been changed, does not contain the total intrastate business of the road in Minnesota carried under class rates?

A. No, sir; as I stated before, there would be a very, very small percentage of the business—I would say, off-hand, it would

be less than one percent in revenue—which would not be affected by this order.

Q. And just so far as the amount shown in column 1 falls short of the total revenue received, the percentage of loss shown in the last column will be proportionately excessive?

A. No, sir. As I stated before, column 1 and column 2 are compiled on exactly the same tonnage, affecting the same identical shipments; this business being affected by the reduced rates consequently any items which are omitted from column 1 are also omitted from column 2.

Q. Now, Mr. Parker, don't you see that while that does not change the total net loss, it does change the percentage?

The MASTER: On the whole business.

Mr. O'BRIEN: On the whole business.

A. The percentage of loss would be changed very slightly if all of the business handled at class rates was included in column 1. As I stated before, however, this column includes practically all of the carload and less-carload business handled under the class rates in question, so that I do not think the percentage would be appreciably changed.

Q. Didn't I understand you to say yesterday that this calculation in July and April was based entirely upon the less than carload shipments?

A. Well, I didn't intend to say so, Mr. O'Brien, and I don't think that I did.

Q. I am not sure about that but that is my recollection of it.

A. The confusion probably arose in my attempting to explain the basis of arriving at the percentages which we applied to the various losses which were actually compiled for the two months in question.

Q. You know we had quite a discussion as to whether there would not be larger carload shipments in certain other months and matters of that sort?

A. That discussion, as I recollect it, was merely in connection with the business to and from the terminals in arriving at the per cents.

Q. In preparing Ex. 22 did you use the percentage shown here, 20.08?

A. No, sir; the percentage of 20.08 is merely the percentage of loss between the old and new rates. The percentage I used in connction with Ex. 22 is 18.47 per cent, which is the percentage that the less-carload business between Minnesota points and eastern terminals (St. Paul, Minneapolis, Minnesota Transfer and Hamline Transfer) for the months of July, 1907, and April, 1908, combined bore to the less-carload business handled to and from the same terminals during the year ending June 30, 1908.

Q. Then Ex. 35 does not show the basis upon which you proceeded in ascertaining the loss at all?

A Ex. 35 shows the loss on two bases: under the first heading, on the basis of multiplying the actual figures compiled for July, 1907, and April, 1908, by six, on the theory that those are representative months;—

Q. But that was not done?

A. —under the second heading, on the basis actually used by us in connection with Exhibits 22, 24, 26 and 28, as previously explained.

Q. So that the first set of figures, or the results that would be arrived at by multiplying the business for July and April by six, was not adopted by you?

A. No, sir.

Q. And do not show any real facts in the case?

A. They show that the basis which we used is a conservative one, from our standpoint, and that, if anything, it is more favorable to the state, than any other basis which could be devised excepting an actual compilation of all of the business affected for the entire period covered by the statement—which, as previously explained, was practically out of the question with

the time at our disposal and the force of competent clerks which could have been employed had we endeavored to so compile the statement.

Q. Well, I think that your method of arriving at the percentages and compiling the statement is right; if you had taken proper methods and had included all of the business it would be hardly possible for you to do anything else, you could not be expected to go over the entire shipments, that could not be done; but what I have said with reference to the correctness of the percentage in analyzing the first line of Ex. 35 applies with equal force to the second line of Ex. 35 or the actual method pursued by you, does it not?

A. Yes, sir; the percentage in the second line would be very slightly changed.

Q. Do you know of your own knowledge how much it would be changed?

A. I merely know from the connection which I had with the statements; I personally followed up these statements from day to day as they were being compiled.

Q. Have you with you the memorandum showing the total loss estimated by you during July and April?

A. The loss during July and April was not estimated; as previously stated, it was compiled from an actual examination of the way-bills, carload or less-carload affected by the order, with the exception of the carload groceries to jobbing centers which, as previously stated, were compiled actually for the entire period.

Q. Now, what was it?

A. I have this recap under the various headings exactly the same as shown by dividing the various figures on Ex. 35 by 6; in fact, this recap that I have is the basis of Ex. 35.

Q. The rate upon iron ore to Superior and Duluth, you said, was 80 cents a ton?

A. 80 cents per gross ton to the ore dock.

Q. That 80 cents includes the dock charges, does it not?

A. Yes, sir.

Mr. CLOUGH: That is on board the vessel?

Mr. O'BRIEN: I was going to say—

A. It is practically 80 cents per ton on board the vessel?

A. Yes, sir; that includes the handling charges, as I understand it.

Q. And that is the same rate that is charged by all of the other roads reaching the iron range?

A. I understand so.

Q. Every other road except the Great Northern owns its own docks?

A. I am not aware of that fact.

Q. Do you know who owns the docks used by the Great Northern road?

A. No, sir.

Q. Do you know when they were built?

A. No, sir; excepting in a general way. They have extended them from time to time. That is entirely out of my line, I would merely know it as a matter of information.

Q. You would know it simply from outside information, the same as any stranger would?

A. Yes, sir.

Q. So far as you are concerned you know absolutely nothing about that?

A. Absolutely nothing.

Q. And you know absolutely nothing as to how on this particular road this division of rates comes to be made?

A. No, sir.

Q. Nor were you informed as to that rate?

A. Why, we have used that division for some years.

Q. Well, how do you mean by "you have used that division for some years"?

A. Well, we have applied that division to the business which moved.

Q. The rate charged by the Great Northern is 80 cents?

A. Yes, sir; that is the first charge.

Q. Do you have charge of the accounting with the ore company for any portion of that rate—is that in your department?

A. I have charge of the accounting, but as far as the ore company is concerned it is the same to me as any other foreign line would be.

Q. You mean the dock company?

A. Excuse me, the dock company.

Q. It is the same to you as any other foreign company?

A. That is, I allow that much revenue to them per ton.

Q. But of course you have nothing to say to the actual division of the receipts?

A Yes, sir; I divide the receipts in my office.

Q. You mean upon your books, or do the checks pass through your office?

A. Oh, no, not the checks; we make this division the same as we make the division of any other interline way-bill, and merely credit them with that much money.

Q. You know nothing about the ownership of the dock?

A. Absolutely nothing.

Q. When it was built, or how it came to be built, or anything connected with it?

A. No, sir; not from any records in the office.

By Mr. BUTLER:

Q. I would like to have the Master and witness and counsel refer to page 678 of the transcript. Referring to the tabulation in the testimony on page 678, which was a transcript of a memorandum from which you testified, certain percentages are indicated thereon with respect to four kinds of business mentioned. All of those percentages are over 16 2/3 per cent, and those indicated, as I understand it, the relation that the business referred to in that statement, to-wit: the less than carload lot business for the month of July, 1907, and April, 1908—bore to

the whole year's business of the same kind less than carload lots, as ascertained by examining the abstracts of your way-bills for the whole year?

A. Yes, sir.

Q. The percentages indicated on Complainant's Ex. 35 relate wholly to another matter, do they not?

A. Yes, sir.

Q. And indicate the reduction of rate. Now, one-sixth of the year would be 16 2/3 per cent—

A. Yes, sir.

Q. —which if used would increase the loss as indicated by your first basis in Ex. 35?

A. Yes, sir.

Q. And the percentage indicated in your testimony is, in each instance, larger than 16 2/3 per cent, which indicates that the less than carload lot business in these two months was, in every instance, more than one-sixth of that kind of business which you examined?

A. Yes, sir.

Q. And it was for the purpose of approximating the proportion or the relation of the year's business to the two months business that those percentages were established?

A. Yes, sir.

Q. Mr. O'Brien in his cross-examination this morning referred to some confusion that existed in your testimony yesterday as to whether or not you had in fact revised fully the two months business—July, 1907, and April, 1908,—including less than carload lots and all-carload lots. Now, yesterday in your testimony you did say that you took into account only less than carload lots, but that was in reference to the establishment of these percentages?

A. Yes, sir.

Q. And the information on Ex. 35 you had here in the court-room with you at that time?

A. Yes, sir.

Q. And made the rough statement at the noon hour which we had marked or offered for marking last night at the time of adjournment?

A. Exactly.

Q. And made it here in the court room, did you not?

A. I started it in the court room and finished it in my office.

Q. At any rate, you gave me the information—the figures—

A. I gave you the rough figures in the court-room.

Q. —before you left?

A. Yes, sir.

Q. And had the rough figures here?

A. Yes, sir.

Q. And these way-bills which you revised for these two months are still in your office and open to access and examination of accountants for the state if they desire to verify your computations with respect thereto?

A. They are.

By Mr. O'BRIEN:

Q. Mr. Parker, take Ex. 35,—the second line shows the method adopted by you for ascertaining the loss?

A. Yes, sir; as shown on the various exhibits referred to.

Q. What per cent of $887,226.15 is $178,213.22?

A. 20.08 per cent. That percentage, Mr. O'Brien, would apply on the three items under each heading; that is, the percentage of loss would be the same for July, 1907, and April, 1908, as for the year. This is merely a percentage of loss and has nothing whatever to do with the percentages which we used in establishing the ratio between the actual business at old and new rates for the months of July, 1907, and April, 1908, as compared with the fiscal year.

CLYDE W. TILTON,

sworn on behalf of Complainants, testified:

By Mr. BUTLER:

Q. Mr. Tilton, where do you reside?

A. St. Paul.

Q. And your occupation?

A. Auditor of passenger receipts for the Great Northern railway.

Q. How long have you been employed by that company?

A. About fifteen years.

Q. And how long have you been in your present position?

A. Since November 1, 1902.

Q. Your duties with respect to receipts from the passenger business are similar to those of Mr. Parker, the last witness, with respect to the receipts from the freight business?

A. Yes, sir.

Q. You have brought here certain statements which we will have marked as exhibits (four in number, I think) and I will ask you generally, were they prepared under your direction in your office?

A. Yes, sir; under my personal supervision.

Q. And from the records which are in your office?

A. Yes, sir, which are a part of our records.

Witness produces statement and same is marked for identification Complainant's Ex. 36-Tilton.

Q. A table marked Complainant's Ex. 36-Tilton, under the caption following: "Great Northern Railway Company statement showing passenger traffic in the state of Minnesota." Mr. Tilton, do the figures upon this table or statement refer exclusively to passenger business done by the Great Northern line during the periods referred to within the state of Minnesota?

A. Yes, sir.

Q. And do they refer exclusively to the business of all kinds in the state, including local and interstate business?

A. Yes, sir.

Q. Now, that we may further make sure that we understand it, it indicates with respect to the years ending June 30, 1905, 1906, 1907 and 1908, the number of passengers carried within the state?

A. Yes, sir.

Q. Passengers within the state one mile and the revenue earned?

A. Yes, sir.

Q. And also compares each year with the subsequent year, or each year with the prior year or prior years, as the case may be?

A. Yes, sir.

Q. And it shows the number of miles of road in operation?

A. The average miles in operation.

Q. The average number of miles in operation during each year, and the number of passengers one mile per average mile in operation? That is, the density of traffic per mile of track.

A. Yes, sir.

Q. And the per cent increased over previous year and the average distance per passenger, the average revenue per passenger and the average revenue per passenger mile?

A. Yes, sir.

Q. Let us take the line relating to June 30, 1906; the number of passengers who rode upon your trains in Minnesota during that year was 2,550,712?

A. Yes, sir.

Q. And these persons, multiplying the distance traveled by each, or adding together the number of miles traveled by each, produces passengers one mile of 156,100,008 miles?

A. Yes, sir.

Q. And produced a revenue of $3,666,257.73?

A. Yes, sir.

Q. The number of passengers carried was an increase over the next preceding year of 5.7 per cent?

A. Yes, sir.

Q. The number of passenger miles produced in that work increased in that year 12 per cent over the next preceding year?

A. Yes, sir.

Q. And the revenue increased 10.6 per cent?

A. Yes, sir.

Q. The average mileage in operation during that year was 2,033 miles, which was 14 miles over the average of the next preceding year?

A. Yes, sir.

Q. The figures in the column under the caption "Passengers one mile per average mile in operation" is arrived at by dividing the number of passengers carried by the number of—How is it arrived at?

A. It is arrived at by dividing the number of passengers one mile by the average miles in operation.

Q. Dividing the passengers one mile instead of the number of passengers carried?

A. The number of passengers carried one mile; passengers one mile is really what it is.

Q. That is, divides the figures in the second column by the average mileage in operation?

A. Yes, sir.

Q. And that indicates density of traffic on the average per mile of road?

A. Yes, sir.

Q. And that increased in the year ending June 30, 1906 11.2 per cent over the same in the preceding year?

A. Yes, sir.

Q. The average distance per passenger is shown to be 61.2 miles?

A. Yes, sir.

Q. That is arrived at by dividing passengers one mile by the number of passengers carried?

A. Yes, sir.

Q. That was an increase over the preceding year of 3.5 miles?

A. Yes, sir.

Q. And on the average you received from each passenger $1.44 in that year, as against $1.37 in the year next preceding?

A. Yes, sir.

Q. And on the average received 2.348 cents per passenger per mile?

A. Yes, sir.

Q. Prior to May 1, 1907, the maximum passenger rates in Minnesota charged by your line was 3 cents per mile?

A. Yes, sir.

Q. At that time the act of the legislature involved in this litigation took effect, and since then 2 cents has been the maximum?

A. Yes, sir; two cents was the maximum on intrastate traffic.

Q. That is, the law went into effect?

A. Yes, sir.

Q. In the fiscal year ending June 30, 1907, was included two months of the business (May and June) after the passenger rate law took effect?

A. Yes, sir.

Q. And that law has been in operation ever since and covering the fiscal year June 30, 1908, as shown on this statement?

A. Yes, sir.

Q. Comparing the business of the year ending June 30, 1908, with the preceding year, the number of passengers increased 18.6 per cent?

A. Yes, sir.

Q. The number of passenger miles increased 6.9 per cent?

A. Yes, sir.

Q. This red ink on this statement means a decrease?

A. Yes, sir.

Q. The revenue decreased 7.1 per cent?

A. Yes, sir.

Q. And in 1908 there were 17 miles more of road in operation on the average than in the next preceding year?

A. Yes, sir.

Q. And the density of traffic was greater?

A. Yes, sir.

Q. The average distance per passenger was somewhat less and the average revenue per passenger was somewhat less?

A. Yes, sir.

Q. And the average revenue per passenger per mile was 1.974 cents as compared with 2.272 cents in the next preceding year?

A. Yes, sir.

Mr. BUTLER: Ex. 36 is offered in evidence.

Q. In answer to one of my questions you indicated in substance, as I caught your meaning, that during the fiscal year ending June, 1908, the Minnesota intrastate business was on the basis of a 2-cent maximum?

A. Yes, sir.

Q. This statement includes all of the interstate business done in Minnesota?

A. Yes, sir.

Q. And by some method the earnings from each interstate passenger is divided between Minnesota and the rest of the trip; is that right?

A. Yes, sir.

Q. On what basis is that division made in getting at these figures?

A. On all interstate traffic in the state of Minnesota, Minnesota's proportion is arrived at on a mileage prorate.

Q. What is the maximum local rate for passengers in North Dakota now?

A. Two and one-half cents per mile.

Q. How long has it been two and one-half cents per mile?

A. Since July 1, 1907.

Q. And before that what was it?

A. Three cents per mile.

Q. Prior to May 1, 1907, the date of the taking effect of the Minnesota act, what was the maximum basis of rates in all the states on your line?

A. Three cents per mile.

Q. And what is it now in all of the states except Minnesota and North Dakota?

A. It is three cents per mile, with the exception of Wisconsin, and of course our line in Wisconsin is very small and it does not make any difference—would not affect us at all.

Q. What is your mileage of track in Wisconsin? have you any passenger stations over there except at West Superior?

A. Yes, we have two other small stations in Wisconsin.

Q. Have you in mind the main-line mileage in Wisconsin for transportation of passengers?

A. Why, it is somewhere around thirty miles, I think.

Q. Well, Wisconsin went to a two-cent basis about the same time that Minnesota did, did it not? the same year?

A. The same year; about three months later.

Q. There were two reductions in Wisconsin in 1907, were there not, first to two and one-half, and then to two cents?

A. Yes, sir.

Q. The Commission reducing it to two and one-half.

A. I think I have the exact dates.

Q. If you can give those dates you may do so.

A. No, I left out Wisconsin, but it was some time in August, 1907.

Q. That it went to a two-cent basis?

A. Yes.

Q. But the change from three cents to two and one-half was also made in that year, was it not?

A. Yes, sir.

Recess until 2 P. M.

AFTERNOON SESSION.

Q. Mr. Tilton, when we stopped at noon, we had just spoken of the basis of division of the interstate passenger earnings between Minnesota and the rest of the line, and, as I understood you to say, in those cases where a part of the trip was within Minnesota and a part of it without Minnesota, you divided the fare earned by the transportation on the basis of a mileage prorate?

A. Yes, sir.

Q. During the time that has elapsed since the Minnesota passenger rate law took effect, have interstate passenger fares for passenger trips, a part of which is in Minnesota, averaged higher than two cents per mile?

A. Yes, sir; they all would; Minnesota's proportion would be always higher than two cents per mile; that is, on first-class traffic.

Q. When you say always, you didn't intend to include excursions—

A. No, sir; first-class traffic.

Q. —or commutation fares, or anything of that sort, if there be any such interstate. So that Ex. 36, then, includes and is based upon earnings so divided giving to Minnesota for the regular interstate tickets more than two cents per mile for the distance of the interstate trip traveled in Minnesota?

A. Yes, sir; as previously stated, on first-class traffic.

Q. Yes, I mean on that class of traffic. Now, do you know, or can you tell with any reasonable approximation how much the revenue would be reduced in any one of the years referred to on this exhibit if the interstate business in Minnesota was

figured on the basis of the two cent maximum allowed by the state law?

A. Well, we never had occasion to work up a set of figures of that nature, but I believe that it would affect Minnesota's proportion at least ten per cent.

Q. That is to say, you think that Minnesota's proportion of the interstate revenue would be reduced about ten per cent; is that what you intended to express?

A. Yes, sir.

Mr. BUTLER: Ex. 36 is offered in evidence.

Q. A paper marked Ex. 37-Tilton, under caption, "Great Northern Railway Company statement showing passengers and passengers one mile in state of Minnesota, year ending June 30, 1908." This exhibit was compiled by you or under your direction from data in your office, Mr. Tilton?

A. Yes, sir; under my personal supervision.

Q. Now, will you explain what it shows.

A. The exhibit referred to shows the movement of passengers one mile in the state of Minnesota, divided between intrastate business and interstate business, the percentage of this business being shown as to the total.

Q. It shows, as a matter of fact, that in the year ending June 30, 1908, 49.9 per cent of the business in Minnesota was intrastate and 50.1 per cent was interstate business?

A. Yes, sir.

Q. Very nearly half and half?

A. Yes, sir.

Q. Next what does it show?

A. It shows that the intrastate passengers one mile in the state of Minnesota was 18.7 per cent of the passengers moved one mile for the entire system. It also shows that the average haul for the intrastate passengers was 36.8 miles; the average haul for interstate passengers was 133.8 miles; the average for all passengers carried in the state of Minnesota was 57.8 miles.

Q. The same as shown in Ex. 36 in that respect?

A. Yes.

Mr. BUTLER: Ex. 37 is offered in evidence.

Q. Ex. 38-Tilton, under caption, "Great Northern Railway Company, statement showing passenger revenue during the fiscal year ended June 30, 1907, on basis of rates in effect prior to May 1, 1907, and the reduction in revenue by the application of rates effective on that date." Was this statement prepared from data in your office under your direction, Mr. Tilton?

A. Yes, sir.

Q. The first line refers to the revenue from Minnesota local, or intra-state business?

A. Yes, sir.

Q. And the first figure in the first column, to-wit: $1,954,522.99, indicates what the earnings would have been in that year had the rates not been reduced at all?

A. Yes, sir.

Q. They were reduced, however, on May 1st, and two months of that year on the basis of the two cent rate was included in the earnings in fact?

A. Yes.

Q. The figure given, then, which I have just given does not indicate the earnings for the year June 30, 1907, but is made up by taking the earnings for ten months as they were the first ten months of that fiscal year, and then estimating the earnings for the last two months on the basis of what they would have been assuming the same travel had the rates not been changed?

A. Yes, sir.

Q. And the next figure on that line, to-wit: $1,483,879.82, is made up assuming the same travel had taken place on the lower scale of rates which became effective May 1, 1907?

A. Yes, sir.

Q. And the third column under the word "reduction" indicates the difference of revenue?

A. Yes, sir.

Q. Upon the intrastate passenger miles in Minnesota, first figured on the basis of the old rates, and next figured on the basis of the new rates?

A. Yes, sir.

Q. As a matter of fact, the rates changed during the year and neither one of these figures indicates what was actually earned in that year?

A. Yes, sir.

Q. Now, the next line is the Minnesota proportion of revenue from interstate traffic; the same method was followed in producing these figures, that is to say, the first figure $2,117,037.48 is made up by taking the Minnesota proportion of revenue from interstate traffic for the first ten months of that fiscal year, and then taking the passenger miles included for the next two months and computing it on the basis that it was before the change of rates?

A. No, sir; for the reason that the interstate rates were not changed at the time the intrastate rates were changed.

Q. How long after? have you the date?

A. On July 6, 1907.

Q. That was after the conclusion of the fiscal year?

A. Yes, sir.

Q. Is the figure which I last read the actual figure,—Minnesota proportion of revenue from interstate traffic during the fiscal year ending June 30, 1907?

A. Yes, sir.

Q. The amount as it was actually apportioned as the business came in?

A. The amount as shown by our statistical records.

Q. And made at the time of the transactions, about the close of the fiscal year?

A. Yes, sir.

Q. Now, the next figure on that line, $1,606,312.22, how is that figure arrived at?

A. Do you mean the total of the figures?

Q. What is it, yes.

A. Well, that is the amount that would have accrued in Minnesota on interstate traffic if the rates had not been changed; or, in other words, if the new rate had been applied to interstate business moving during the year ending June 30, 1907.

Q. That is, that is based on the same number of passenger miles precisely the same business as the first figure on that line is?

A. It is worked up in a similar manner.

Q. The same number of passenger miles is assumed, but the lower scale of rates applied?

A. Yes, sir; that is, the lower scale of rates was applied to the business affected.

Q. I was just coming to that. Now, how was that application of the lower scale of rates made? that is, what I am trying to get at is this: Before the change of your interstate rate, was there some of this Minnesota proportion of interstate revenue which yielded less than two cents a mile?

A. Well, if any interstate business yielded less than two cents per mile, such business was not taken in consideration.

Q. You mean it was not changed?

A. It wasn't changed; the rate was not changed.

Q. And that business would enter into both figures, just as it was at the rate it earned in fact—unchanged?

A. Yes, sir.

Q. And it was only the business which theretofore yielded more than two cents a mile that was reduced to the basis of two cents a mile; is that it?

A. Yes, sir.

Q. Now, what class of business (if you have in mind from memory) was there which yielded as Minnesota's proportion of revenue from interstate business less than two cents a mile during the fiscal year ended June 30, 1907?

A. What is called excursion business and second-class business yielded less than two cents per mile.

Q. Can you illustrate an instance of excursion business that is interstate that would enter into this figure producing Minnesota's proportion of that revenue in that year?

A. Well, we can take what is called the home-seekers' rate to the North Pacific coast points.

Q. And what rate did that move at in 1907?

A. At one-third, plus $2.

Q. And that would in all instances be less than two cents per mile?

A. Yes, sir.

Q. And that is divided between Minnesota and the rest of the line on the basis of a mileage prorate?

A. Yes, sir.

Q. So that business remained unchanged; it is carried at the same amount in the first figure, $2,117,037.48 as it is $1,606,312.22?

A. Yes, sir.

Q. It that called excursion business?

A. Yes.

Q. Or second-class business?

A. No, that is excursion business; round trip.

Q. Now, will you illustrate what you mean by the second-class business?

A. Well, that is where the rates are graded; for instance, a second-class rate is less than a first-class rate to certain points, for instance, we have the second-class colonists' rates at different periods of the year. The rate is generally from our eastern terminals to Pacific coast points, $25; that is what is called a second-class colonists' rate, and that yields about a cent and a half a mile.

Q. And that is unchanged?

A. That is unchanged.

Q. In making up these figures we last mentioned. The State fair of 1906 would be in September, 1906, and would be in this fiscal year?

A. Yes.

Q. Were there any interstate rates reduced below a two-cent basis for the fair of that year, or do you now recall?

A. The State fair rates were less than two cents a mile.

Q. From Dakota?

A. From Dakota points.

Q. Did that furnish another instance in which the Minnesota proportion of revenue from interstate business was not changed and is carried the same on both sides of this statement?

A. Yes, sir.

Q. Now, aside from these three illustrations that have been given, are there others that you hold in mind?

A. Well, they will cover the point.

Q. During that year were mileage books used?

A. Yes, sir.

Q. On what basis per mile—what was the cost to the traveler?

A. Well, certain books were sold at the basis of two cents per mile.

Q. Any below two cents?

A. No, sir; two cents was the minimum.

Q. So those that sold at two cents would remain unchanged here?

A. Yes, sir.

Q. What other rates were there for mileage books?

A. Two and one-half cents and a few cases of three cents.

Q. And what was the largest volume of mileage used, the three cents, the two and one-half or the two cent, or do you hold that in mind?

A. The two-cent mileage books were used to the greatest extent.

Q. Did you have any regular blanket long haul interstate rates which were less than two cents a mile?

A. Nothing less than two cents; that is, first-class, nothing less than two.

Q. What was the fare to Puget Sound points from the Twin Cities?

A. The first-class fare was $50.

Q. That was the fare when these rates took effect?

A. Yes, sir.

Q. How long did it remain at that?

A. Till February 1, 1908.

Q. Is that higher than two cents a mile?

A. Yes, sir.

Q. And what was it changed to at the time of the reduction in February, 1908?

A. To $48.90.

Q. That was after the reduction in Dakota?

A. That was after the reduction in Dakota.

Q. At the time and immediately after the reduction in Minnesota, May 1, 1907, could passengers between Twin Cities and Puget Sound points covered by this blanket rate of $50 save any money by buying two tickets, each calling for a part of the trip, one for the Minnesota portion and the other for the rest of the trip?

A. Not at that time.

Q. After they reduced in Dakota to two and one-half cents, how was it?

A. Why, then they could, when the through rates were changed, the passengers could buy a ticket to the Minnesota state line.

Q. That is from St. Paul?

A. From St. Paul to the Minnesota state line.

Q. That would be East Grand Forks or Breckenridge, which way do you go?

A. It would be the Soo Line; the state line and the Soo Line railway between Minnesota and Dakota. He could buy a ticket to I think it is Fairmount and he could buy another ticket from Fairmount to Seattle.

Q. On your line?

A. On the Soo Line; which would make a through rate, quoted and used by all lines.

Q. And that made the Soo rate—the sum of the locals on the Soo, what?

A. $48.90.

Q. When you reduced in February, 1908, what did you reduce the $50 rate to?

A. To $48.90.

Q. To meet that condition?

A. Yes, sir; as previously stated, that was used by all lines—a common rate.

Q. Now, in these figures that I have called attention to, especially in the figure under "basis of rates effective May 1, 1907, $1,606,312.22," is there any loss or deduction made in producing that figure on account of the Seattle business?

A. Yes, sir; in that amount is included $3,330.80 covering first-class business to Pacific coast points, taking the blanket rate of $50.

Q. That covers all the business there was so affected by that blanket rate?

A. Yes, sir.

Q. And if it be considered then that the Minnesota reduction was not responsible for the reduction of that blanket rate of $50, then that figure which you have given, $3,330.80, should be added to the $1,606,312.22?

A. Yes, sir.

Q. And it would reduce the difference that much; and subtracted from the reduction in the third column, $510,725.26; am I right?

A. Yes, sir.

Q. And if it be considered that Minnesota was responsible for a part of that and North Dakota responsible for a part of that, the figure which you have given, $3,330.80, should be divided in accordance with the responsibility, I take it?

A. Yes, sir.

Q. The next subdivision of your statement, Ex. 38, is under the caption, "showing result if same basis of rates, effective May 1, 1907, in Minnesota, was applied on all traffic handled"—does that mean on all traffic handled on the line of the Company?

A. Yes, sir.

The MASTER: That is the entire line?

Mr. BUTLER: That is the entire line; I will try to make that clear.

Q. The first line in that subdivision relates to the intrastate business in all of the states touched by the line of the Great Northern except Minnesota?

A. Yes, sir.

Q. How did you get at the first figure in that line, $3,942,609.63?

A. That amount is the actual intrastate revenue as shown by our permanent records.

Q. That is, it was separated about the time the business was done and has been kept as a matter of record against each state?

A. Yes, sir.

Q. And this is simply the summation of the intrastate earnings in the states other than Minnesota for this fiscal year in question?

A. Yes, sir.

Q. Taken right from the records. The next figure on the line is on the basis of rates in Minnesota and is stated at $2,779,490.91; how did you get at that figure?

A. The intrastate traffic, excluding Minnesota, was figured on a rate of 1.96 cents per mile, or the average rate on similar

traffic in Minnesota excluding commutation business to lake Minnetonka points, that traffic not being considered as in the other states there is no similar business.

Q. Where did you get the 1.96 cents per mile? that you say was the average earnings during that year per passenger per mile on intrastate business excluding lake Minnetonka commutation business.

A. After we applied the two cent rate to all business affected; for instance, we took all business affected by that rate and applied the two cent rate to it, and then we got our average rate per mile in accordance with the total number of passengers carried one mile on intrastate business.

Q. That is, you made an estimate of what the Minnesota intrastate business would have yielded per passenger per mile if the 2 cent law had been in effect during the whole of this fiscal year eliminating the commutation business to lake Minnetonka?

A. Well, I don't know that you could call it an estimate; we took the actual figures.

Q. Well, you computed it?

A. We took the actual movement of each passenger.

Q. And computed it?

A. And computed it.

Q. Of course the maximum rate being two cents, the intrastate traffic could not average higher than that?

A. No, sir.

Q. And it might average lower, probably would have averaged lower because in some instances you have to accept less than two cents in order to meet the short line rate?

A. Yes, sir.

Q. You eliminated, then, in your computation, to get this average, the lake Minnetonka commutation business and any other business—was there any excursion business below two cents to be eliminated in addition to that?

A. No, that is the only business eliminated.

Q. And then by multiplying the number of passenger miles in the aggregate intra-state in all the states other than Minnesota by 19.6 mills, the second figure in this line $2,779,490.91 was produced?

A. Yes, sir.

Q. And the reduction is indicated in the third column?

A. Yes, sir.

Q. Stated in another way, that means this: that if the rate per passenger per mile of 19.6 mills were applied to the passenger miles intrastate in all the states on your line except Minnesota for this fiscal year, the revenue on that kind of business would have been reduced $1,163,118.72?

A. Yes, sir.

Q. The next line on this exhibit is designated "interstate, excluding Minnesota," by which I take it is meant all of the interstate passenger business of your Company during that fiscal year except the Minnesota proportion of the interstate business which is included in the first subdivision of your statement?

A. Yes, sir.

Q. The first figure on that line is $3,190,236.32; where did that figure come from?

A. Those are the figures drawn off from our permanent office record.

Q. This interstate business was apportioned to the other states in like manner as it was apportioned to Minnesota, as a matter of routine record, at the time the business was done?

A. Yes, sir.

Q. And this figure which we have last mentioned is the mere addition from your records of the interstate proportion in the various states other than Minnesota?

A. Yes, sir.

The MASTER: You say excluding Minnesota; that is, Minnesota interstate?

Mr. BUTLER: Yes, that is included, your Honor will notice, on the second line.

The MASTER: Would that exclude a passenger from Fargo to Duluth?

WITNESS: No, that would be interstate.

The MASTER: Yes, it would be interstate, but would it be included? he is carried through Minnesota.

Mr. BUTLER: Well, let us take an example of a ticket from Fargo to Duluth.

Q. Now, as a matter of keeping your records, what would be the fare? do you hold that in mind?

The MASTER: I had in mind where a passenger is carried clear through the state.

Mr. BUTLER: Oh, Fargo-Superior would be the exact case.

The MASTER: Well, yes—no, to Duluth.

Mr. BUTLER: But call it Fargo-Superior, it would be the same rate.

The MASTER: Yes, that would be the same, but what I had in mind he would go clear through the state.

Mr. BUTLER: That is an interstate haul.

WITNESS: Interstate.

Q. And how many states would receive credit for that?

A. North Dakota, Minnesota and Wisconsin.

Q. The Minnesota proportion of that is included in the second line on this exhibit?

A. Yes, sir.

The MASTER: That is what I wanted.

Q. And this figure that we have last mentioned, $3,190,236.32, includes the Wisconsin and Dakota share of it?

A. Yes, sir.

Q. How was the next figure on that line produced, to-wit: $2,820,395.09?

A. To the class of business affected by the rates we applied the maximum rate of two cents per mile, because we did not have

any basis to find out what the actual rate per mile was on such traffic in Minnesota; Minnesota's interstate business being divided on a mileage prorate, it gave them more than their maximum of two cents, while the rate would be less than two cents; in order to be as fair as possible we used two cents.

Q. That is, to the number of passenger miles which would have been affected by the reduction to two cents which are included in the computation producing $3,190,236.32, you applied a two cent rate, and to the sum produced by that added the amount of the unaffected business which would have carried the same on both sides as you have heretofore explained?

A. Yes, sir.

Q. And that indicated a reduction upon those assumptions of $369.841.23?

A. Yes, sir.

Q. The last portion of your Ex. 38 is the addition of the totals in the first and second subdivisions, and shows a total reduction of $2,514,358.38?

A. Yes, sir.

Mr. BUTLER: Ex. 38 is offered in evidence.

Q. I observe at the bottom of that exhibit a note which reads as follows: "Traffic to or from stations in Minnesota interchanged with other lines at Minnesota junction points, originating or destined to points in other states, considered as interstate" business. That is simply for explanation of how the exhibit was made up?

A. Well, formerly in preparing our statistics a ticket that we would receive from a foreign line at St. Paul, the passenger's destination being to a local point in Minnesota, was considered as local business irrespective of where that passenger originated at or otherwise purchased his ticket. This statement is prepared on the basis if the passenger purchases his ticket at Chicago, for example, to Fergus Falls we would show that as interstate business.

Q. And was there credited to Minnesota and to the revenue of Minnesota in such case all that the Great Northern got out of the haul?

A. Yes, sir.

Q. And in such instance there was no matter of mileage prorate at all?

A. No, sir.

Q. The amount that the Company got was credited to the state?

A. Credited to the state direct.

Q. Complainant's Ex. 39-Tilton, a statement under caption, "Great Northern Railway Company, statement showing passenger revenue on basis of rates in effect during the fiscal year ended June 30, 1908, and reduction in such revenue by the application of rates in effect prior to May 1st, 1907." This statement, Mr. Tilton, was prepared by you or under your direction from data in your office?

A. Yes, sir.

Q. And is in the same general form and upon the same general plan as Complainant's Ex. 38-Tilton, the last exhibit?

A. Yes, sir.

Q. Now, let us take it line by line for a while at least. The first line is indicated to be revenue from Minnesota intrastate business, on basis of rates effective May 1, 1907, $1,750,522.02; is that the amount of money actually received from Minnesota intrastate business during the fiscal year in question?

A. Yes, sir.

Q. The rates were in effect during the whole year covered by this exhibit?

A. Yes, sir.

Q. And that shows the actual figure. Now, the next figure in that line under caption "On basis of rates effective prior to May 1, 1907," $2,545,113.02, is made up how?

A. It is made up on the basis of the rates in effect prior to

May 1, 1907, applied to the business affected by the reduction.

Q. And of course the reduction didn't affect business which theretofore had been done on the basis of less than two cents?

A. No, sir.

Q. And that was eliminated as you described with respect to Ex. 38?

A. Yes, sir.

Q. And the next line on the exhibit, "Minnesota proportion of revenue from interstate traffic on basis of rates effective May 1, 1907," $1,890,105.43, is that the amount that was currently credited as Minnesota's proportion of revenue from interstate business, about the time that the business was done?

A. Yes, sir.

Q. And the figures $2,579,488.82, was arrived at how? that is, as it appears under the caption, "On basis of rates effective prior to May 1, 1907"?

A. To the business affected was applied the rates that were in effect prior to May 1, 1907.

Q. And was it necessary in that case to eliminate any business that was on a lower scale before that time?

A. Yes, sir.

Q. As you described with respect to the other, Ex. 38?

A. Just the same.

Q. In this matter is the blanket rate from eastern Minnesota points to Puget Sound points involved as it was with respect to Ex. 38?

A. Yes, sir.

Q. And to what amount?

A. $2,418.80.

Q. And if it be considered that that was improperly included, the reduction, to-wit: $689,383.39 should be reduced by the sum which you have just mentioned?

A. Yes, sir.

Q. The next subdivision of your exhibit is under caption

"Showing result if same basis of rates effective May 1, 1907, in the state of Minnesota, was applied by other states." Is this and the subsequent portion of your Ex. 39 made on the same plan and basis as the corresponding part of Ex. 38?

A. Yes, sir; only there is a slight change in the average rate, but it is worked up on the same basis.

Q. That is, in the average rate as applied to the intrastate in other states?

A. Yes, sir.

Q. As to Ex. 38 that average rate was 19.6 mills; what was the figure used with respect to this one?

A. It was 1.955 cents.

Q. That would be 19.55 mills?

A. Yes, sir.

Q. Mr. Tilton, it is no part of your business to make the passenger rates, you have nothing to do with the rate-making?

A. Nothing to do with the rate-making.

Q. And you are simply an accounting officer and charged with the duty of keeping account of and anditing passenger receipts?

A. Yes, sir.

Q. Do you know whether or not the rates have been changed on your road since May 1, 1907, as respects both the business local to Minnesota and interstate business touching Minnesota?

A. The rates were changed, certainly.

Q. Have they all been changed, all the regular rates, or do you know about that?

A. All the first-class rates have been changed; of course, there are some rates that haven't been changed.

Q. And what rates have not been changed?

A. Commutation rates.

Q. Interstate or local?

A. They are all local.

Q. Have you any regular rates, either local or interstate,

which existed prior to the taking effect of this two cent passenger law, that remain now?

A. None at all; that is, first-class rates.

Q. That is what I meant by the "regular." Now, the second class rates, which were in existence prior to the taking effect of this law, were below two cents a mile?

A. Yes.

Q. And they have remained unchanged?

A. Well, with the exception of some rates that were taken out on account of the reduction in the state rates making a lesser rate than the second-class selling rate.

Q. I don't quite understand that.

A. Well, for instance—

Q. Can you illustrate it? Perhaps it would be easier for us.

A. Yes; formerly there was a second-class rate of $10 in effect to North Dakota points.

Q. From where?

A. From the Twin Cities or eastern terminals. And that $10 second-class rate applied to all points where the first-class rate was greater. Of course this reduction in rates pulled everything down to less than $10.

Q. And that had the effect of making the $10 a higher rate?

A. A higher rate than the first-class rate.

Q. And that put it out of office on the principle that the lower rate always puts the higher one out of office?

A. Yes, sir; out of business.

Q. Could you indicate the date or about the date, Mr. Tilton, when all of the first-class rates in Minnesota and interstate rates to or from points in Minnesota were changed? You say they have been changed since May 1, 1907, and I wanted to get if I could about that date. If they were changed at different times give us the later date so as to give us a starting point on the basis of complete change to the present situation.

A. In Minnesota, the rates were reduced from 3 cents to 2

cents May 1, 1907; on July 6, 1907, the rates from St. Paul and Minneapolis to North Dakota points were reduced to the basis of local state rates, that is, 2 cents in Minnesota and 2½ cents in North Dakota; on April 1, 1908, interstate rates from points east of Montana, Dakota state line to points west, and vice versa, were reduced to the basis of state rates.

Q. And you gave us the date of the change of the blanket out to Puget Sound?

A. Yes, that was February 1, 1908.

CROSS EXAMINATION.

By Mr. O'BRIEN:

Q. I call your attention to Ex. 36; the last column in that exhibit gives the average rate per passenger per mile received by the Great Northern road in the years respectively set forth in the first column of the exhibit?

A. Yes, sir.

Q. The average amount received in Minnesota in the year ending June 30, 1906, was 2.348 cents?

A. Yes, sir.

Q. In 1907 it was 2.272 cents?

A. Yes, sir.

Q. Was there any change in rates, state or interstate, between the 30th day of June, 1906 ,and the 1st of May, 1907?

A. No, sir; with the exception of there was some change in Wisconsin which didn't affect the Great Northern.

Q. Well, I am talking of on the Great Northern.

A. Yes, there was some change there in Wisconsin; I think it was around April, 1907, but it didn't affect the Great Northern to any appreciable extent.

Q. Well, anywhere else upon your state or interstate business in Minnesota was there any change?

A. No, sir.

Q. Then the difference in the average rate received for the year, between the year ending June 30, 1907, and the year ending June 30, 1906, was caused by the operation of the Minnesota law for two months of the year 1907?

A. That would affect it; yes, sir.

Q. Well, I see your average earnings are less, and I want to know whether you claim that it was entirely because of the law or whether any other cause contributed to reduce the earnings.

A. Well, I should imagine that that was entirely caused by the reduction in Minnesota.

Q. Of course it might be caused by a greater or less amount of this cheap class of travel that you speak of?

A. Yes, sir.

Q. Increased number of excursionists or homeseekers or persons of that sort; but in the absence of any showing to that effect, you would assume that it was caused by the operation of the law?

A. Yes, I would say off-hand that that was the cause of it.

Q. Now, if we take the average rate earned in June, 1906, that is, the year ending June 30, 1906, 2.348 cents and ascertain the difference between that and the average amount earned in the year ending June 30, 1908, or 1.974 cents, we will have at least ascertained the entire reduction in revenue produced by the operation of the law of April 4th fixing two cents as the rate?

A. No, sir; you will not.

Q. Why not?

A. For the reason, as previously explained, the interstate traffic for the State of Minnesota is divided on a mileage prorate; to Minnesota's proportion of the revenue has been credited more than their maximum rate, which comes from the earnings allotted to the other states, which should be allotted to the other states.

Q. Aside from the claim that you make that there should

be a certain allottment made to the other states because of your method of apportioning the rates, your answer to my former question would be Yes?

A. Well, that is an estimate.

Q. Well, are you undertaking by these exhibits to show what the reduction was?

A. Yes, sir.

Q. Do you know how much should be allowed because of the conditions that you speak of with regard to the interstate business?

A. Well, the exhibits show for themselves.

Q. You don't state that at all, do you?

A. What?

Q. This question of the apportionment of the earnings to Minnesota on a mileage basis. That is not referred to in your exhibits at all, is it?

A. No, sir.

Q. You think that is over and above the facts shown by these exhibits?

A. Yes, sir.

Q. Well, now, assuming that that is true, and that it should be added to these exhibits, and confining our attention now to what is shown on the exhibits, you do undertake by these exhibits to show the reduction in revenue brought about by the two cent passenger fare?

A. Yes, sir.

Q. And so far as the showing on these exhibits is concerned, if we take the difference in the average earnings during the year ending June 30, 1908, and the average earnings (that of course means per mile for each passenger) for the year ending June 30, 1906, we will have the reduction brought about by the operation of the two cent passenger law?

A. Not necessarily; there are different classes of business that you have got to take into consideration.

Q. Did any cause except the change of law by the legislature intervene between those periods to reduce your earnings?

A. Why, I couldn't say.

Q. Do you claim that there was any other cause than the passage of that law which produced the reduction in revenue shown on those exhibits?

A. I don't claim anything.

Q. Well, do you claim that there was any other cause except the passage of the law which produced the results shown by you on these exhibits?

A. Well, it is self-evident that the reduction of rates caused a reduction shown by these exhibits.

Q. Do you claim that there was any other cause for the reduced revenue than the passage of the law I have spoken of?

A. I do not know of any other cause.

Q. Then, if that was the sole cause, and if we find the average earning per passenger per mile during the year 1906, and the average earning per passenger per mile during the year 1908, and ascertained the difference between those amounts, do we not have the average reduction per passenger per mile produced by the two-cent law?

A. Not necessarily.

Q. What do you mean by not necessarily?

A. Well, in previous years we might have had more excursions, more business that would reduce the rate; and in the absence of similar business in 1908 it would make the rate that much higher.

Q. Have you attempted to show that?

A. No, sir.

Q. In these exhibits?

A. No, sir.

Q. Are you able to show it?

A. Not very well.

Q. Could you have demonstrated exactly how much business

was done at less than two cents and how much business was done at more than two cents in each of these years?

A. In a measure, yes.

Q. And in that way you could have arrived at the exact amount of reduction brought about by the operation of the law?

A. I don't know as I quite understand your question.

Q. If you had exhibited each condition and each cause, you could have told exactly how much reduction was caused by the passage of the law?

A. Well, we only took the rates that were affected.

Q. What is the difference, as a matter of fact, in the average earnings in Minnesota, per passenger per mile, between the year ending June 30, 1906, and the year ending June 30, 1908?

A. 3.74 mills.

Q. In 1907, as shown by Ex. 36, you carried passengers in Minnesota one mile 172 509,972?

A. Yes, sir.

Q. And you earned upon that, as shown on Ex. 38, or would have earned at the rates prior to the change in the law $4,071,590.47?

A. Yes, sir; if the rate had not been changed.

Q. At the rates effective May 1st, however, you say you would only have earned $3,090,192.04?

A. Yes, sir.

Q. And that therefore you have lost in revenue, or did lose in revenue, or would have—

A. Would have.

Q. Would have lost in revenue, during that year, $981,398.43?

A. Yes, sir.

Q. Directly and necessarily by the operation of this law?

A. Yes, sir.

Q. How much would the revenue from 172.509,970 passen-

gers carried one mile at 2 cents per mile?

A. $3,450,199.44.

Q. So that if you did charge two cents per mile for the business actually transacted that year, your revenue would have been the amount you have mentioned, instead of $3,090,000?

A. Yes, sir.

Q. Now, on that basis what would have been the loss in revenue?

A. $360,007.40.

Q. Instead of $981,398.43?

A. Yes, sir.

Q. Now, your road furnished excursions because you wanted to, didn't you?

A. No, sir.

Q. Because the law compelled you to?

A. No, sir.

Q. You furnished excursion tickets because you wanted to, didn't you?

A. Not necessarily.

Q. The law doesn't compel you to, does it?

A. Not necessarily.

Q. You furnished commutation tickets to the lake sides because you wanted to, didn't you?

A. Because the public wanted them.

Q. But it was a matter of putting in your own rates, wasn't it?

A. Well, that is more of a traffic question.

Q. So the question here is really whether the legislature shall determine whether all of the people of the state shall ride upon an equal basis, or whether the board of directors of your Company shall determine which shall pay three cents per mile and which shall pay one and a half cents a mile?

A. Not at all; not at all; you are leaving out the element of

competition, all rates to competitive points.

Q. How many points in Minnesota that are competitive has the Great Northern got the long haul to? (No answer.) Of course you haven't gone into that, I know. Now, we have here in other states, in the second portion of Ex. 38, in the first line, intra-state business excluding Minnesota, in other states, revenue, $3,942,609.63; that was the actual revenue received by you in that time?

A. Yes, sir.

Q. On the basis of Minnesota rates. Now, what basis of Minnesota rates did you adopt there—two cents per mile?

A. No, we took all the intrastate business in Minnesota and found out what we would have received at the rate in effect subsequent to May 1, 1907, on business affected; we took our passengers one mile intrastate, and got an average rate per mile, which average rate was applied to the business affected in the other states.

Q. That is, you took all of your rates in Minnesota which were less than two cents; then you reduced all rates in Minnesota over two cents to that sum, and you ascertained what the average rate per passenger per mile would be on that basis?

A. Well, we didn't include Lake Minnetonka commutation and excursion business, for the reason that we have no similar business in other states.

Q. Outside of the Minnetonka rates, is that it?

A. Yes, sir.

Q. Outside of the Minnetonka rates you took all of the business as I have described it, and found out what the average rate per passenger would be?

A. Yes, sir; on business affected.

Q. Well, you found out what the average rate for all business would be by the road, didn't you, because you combined business affected and what you call business not affected?

A. Well, we only applied the reduction to the business that was affected.

Q. Oh, in the other states?

A. In any state.

Q. Well, now, let us say that you wanted to ascertain what your reduction would be in the State of Washington and your total revenue from intrastate business in Washington was a million dollars—

A. Yes, sir.

Q. And that produced an average of three cents per mile—

A. Yes, sir.

Q. —you took your voluntary rates in Minnesota which were less than two cents per mile, computed all other rates at two cents per mile (with the exception of the Minnetonka business) and ascertained what the average earning per passenger per mile was in Minnesota?

A. We didn't take anything into consideration unless it was affected. Now, for instance if we had some low rates in Washington,—which I don't recall whether we did have—which were less than two cents, we would not take them into consideration.

Q. I haven't got to Washington yet; I was asking what your methods were.

A. You have referred to Wasinhgton, and I gave Washington as an example.

Q. I am asking you how you proceeded in Minnesota, what you took as your basis for the purpose of estimating what the Minnesota rates allowed. You took all of your earnings on intrastate business in Minnesota with the exception of the Minnetonka rates?

A. That was affected by the change in rates.

Q. Didn't you take into consideration the business that was less than two cents per mile in Minnesota?

A. No, sir.

Q. I understood you to say first you did. Well, then, you took two cents per mile, didn't you?

A. No, we did not, because we don't get two cents per mile

on all of our business, our first-class business.

Q. Well, you get two cents per mile on all business that was affected, don't you?

A. No, sir; it was on the basis of two cents per mile; for instance, we have a longer haul to meet a short line rate; we carry the passenger, we do not get an average rate of two cents per mile, and for that reason it brings it down slightly under two cents.

Q. I understand that perfectly well but you can't arrive at that result by taking into consideration only business that was affected, because the law didn't compel you to change any rates that were not above two cents per mile.

A. Well, that is getting out of the question entirely.

Q. Well, I see we evidently don't understand each other.

Mr. BUTLER: May I suggest, Mr. O'Brien, you ask him how he got 19.6 mills as applied to this other interstate business; that is what you are trying to find out?

Mr. O'BRIEN: Yes.

Q. How did you get the 19.6 mills, on Ex. 38?

A. We took all the intrastate business in Minnesota that was affected by the reduction in rates.

The MASTER: That is, producing over two cents a mile, is that it?

WITNESS: Producing over two cents a mile; you understand we took the actual passengers, we figured up if we had a thousand passengers between St. Paul and St. Cloud,—we would figure what those thousand passengers would bring us at the new rate; that is, the rate in effect May 1st. On all business affected we made similar calculations. We had our passengers one mile intrastate in Minnesota by classes; you understand that our business is all worked up by different classes; we subdivided our accounts into first-class, second-class, round trip, excursion and mileage. We would take the business affected and apply the passengers moved one mile to the revenue that

we would have received, and got a rate per mile. We applied this rate per mile to the exact similar business in the other states.

Q. Did you make the computation?

A. Yes, sir.

Q. Or direct the computation?

A. Yes, sir.

Q. Well, now, do you claim that there was any class of business which was being carried at more than two cents per mile prior to April 4, 1907, which is now being transported at less than two cents per mile?

A. There is some business, yes, sir; that is, where we have a longer line and meet a short line rate.

Q. Outside of the places where you are compelled by competition to meet a short line rate, do you claim that there is any class of business which was being charged more than two cents prior to April 4, 1907, which is now being carried at less than two cents?

A. No, sir; I do not know of any.

Q. But that competition did reduce your general earnings on that class of business, on business affected in Minnesota, to 19.6 mills?

A. Yes, sir.

Q. So that competition can be said to have compelled a loss in revenue of four-tenths of a mill from what you could earn under the flat two cent rate?

A. Well, that cannot be all charged to competition; for instance take local points on our line; take Sandstone, for instance, the same rate would have applied by a direct line as it would by a longer line.

Q. Well, I think I understand you. You use that figure, 19.6 mills, for the purpose of ascertaining what your revenue would be, for instance, in the State of Washington?

A. Yes, sir.

Q. You found in the State of Washington, I suppose, as you found in Minnesota, that there was some business being carried at less than that figure?

A. I should imagine that there was some.

Q. And if there was any such business as that, that was excluded from your computation?

A. Well, we would not exclude business like that. What we mean by excluding business was the business that was not affected by the change in rates. Now this business was affected by the change of rates. The short line makes a rate, and if the short line rate is figured on the basis of two cents a mile, the long line would have to accept that two cents a mile; so those rates are affected by the change.

Q. And where the rates were not affected, where the rates were already lower than this sum of 19.6 mills, there was no attempt made to equalize them in this computation?

A. No.

Q. That is, you didn't assume in Washington any more than you did in Minnesota that all of your business would have to be transacted at an average rate per mile of 19.6 mills?

A. No, sir.

Q. You only assumed that that portion of the business which had up to that time earned a higher rate than that would have to be transacted at that rate?

A. Yes, sir.

Q. And in that way you estimated the amount in each state, and so found this total amount of reduction that appears in Ex. 38 for intra-state business excluding Minnesota?

A. Yes, sir.

Q. Now, that same principle was followed, I presume, as to interstate business, was it not?

A. No, sir.

Q. What did you do about interstate business?

A. Well, on the business that was a higher rate than two

cents we applied the maximum rate of two cents, because we had no ground to figure out a more actual rate; for instance, as the intrastate rate in Minnesota. As previously explained, Minnesota's proportion of interstate business is arrived at on a mileage prorate; naturally, Minnesota received more than her maximum rate, so we could not use that rate, which is a higher or fictitious rate, and apply it to the other states.

Q. So you used two cents flat?

A. So we used the maximum rate.

Mr. BUTLER: Two cents flat?

WITNESS: Yes, sir.

Q. Now, you applied that to all your interstate business?

A. We applied that to all of our interstate business affected by the change in rates.

Q. That includes business between the states of Montana, Washington—

A. All interstate business.

Q. Over the entire line of the road?

A. Yes, sir.

Q. When you say you made that computation with regard to all of your interstate business, you mean excluding Minnesota business?

A. Yes, sir.

Q. Now, these rates have been in existence in Minnesota since the 1st of May, 1907?

A. Yes, sir.

Q. Your reports to each of the states traversed by your road, and to the Interstate Commerce Commission for the business transacted during the year ending June 30, 1908, have all been rendered, have they not?

A. Why, I would imagine that they had.

Q. The actual effect and operation of these rates upon every portion of your line for that year are known to the proper officers of your road, are they not?

A. Yes, sir, I presume the annual report covers it.

Q. Do you think it is of any advantage to the determination of this case to come in here with an imaginary hypothetical calculation as to what might have happened in the past, when you know exactly what did happen in the past and don't show it, or are you responsible for the matter at all, for the exhibits?

A. Ex. 36 shows what actually happened in the past.

Q. Yes, I know that, but it doesn't jibe with any of the others, does it? because we have just shown with regard to Ex. 38 it doesn't come out the same.

A. That has all been explained.

Q. Now, we will take this Ex. 36 again, in connection with Ex. 39. As shown by Ex. 36, you carried in Minnesota, passengers one mile 184,395,509?

A. Yes, sir.

Q. In Ex. 39 you say your earnings from that were $3,640,627.45, as I understand it?

A. Yes, sir.

Q. But that if the prior rates had been in existence, you would have earned $5,124,601.84, from the same business?

A. Yes, sir.

Q. And therefore you have sustained a loss in Minnesota of $1,483,974.39, during the year ending June 30, 1908?

A. That is what we would have sustained if the same class of business had moved at the same rate which was in effect prior to May 1, 1907; that reduction is shown by an actual analysis of our business.

Q. Now, you earned during the year 1906 before any change was made in rates, on an average in Minnesota 2.348 cents per passenger per mile?

A. Yes, sir.

Q. What revenue would that give for the transportation of 184,395,509 passengers one mile?

A. What average do you want that applied to?

Q. I want that on the average of 2.348 cents.

A. $4,329,606.55.

Q. And the difference between that and $3,640,627.45 would be how much?

A. $688,979.10.

Q. Instead of $1,483,974.39, as claimed in Ex. 39. Now, the second portion of Ex. 39 was prepared in the same manner and upon the same basis as Ex. 38, I presume, was it not?

A. Yes, sir; just exactly.

An adjournment was here taken until the morning of Friday, April 9, 1909, at 10 o'clock.

WITNESSES FOR COMPLAINANTS.

Doddridge, William B:

Direct examination 1143

Cross-examination 1153

Drew, John G:

Direct examination 1910

Complainants' Exhibit 57, Drew,

(Printed with testimony.) 1920

Cross-examination 1960

Complainants' Exhibit 66, Drew 2093

Elwood, Lester B:

Direct examination 554

Complainants' Exhibit 14, Elwood 558

" Exhibit 14-A, Elwood 558

" Exhibit 15, Elwood 561

Cross-examination 573

Emerson, George H.:

Direct examination 943

Cross-examination 953

Hayden, Charles:

Direct examination 162

Complainants' Exhibit 9, Hayden 173

" Exhibit 10, Hayden 176

Cross-examination 183

Re-direct examination 303

Re-cross examination 341

Hill, James J.:

Direct examination 1232

Cross-examination 1325

Re-direct examination 1353

Hogeland, Albert H.:

Direct examination 2

Complainants' Exhibit 1, Hogeland 10

" Exhibit 2, Hogeland 11

" Exhibit 3, Hogeland 15

" Exhibit 4, Hogeland 19

" Exhibit 5, Hogeland 21

" Exhibit 6, Hogeland 24

" Exhibit 7, Hogeland 56

" Exhibit 8, Hogeland 60

Recalled 990

Complainants' Exhibit 50, Hogeland 992

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